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Lawrence J. Saha A. Gary Dworkin *Editors*

International Handbook of Research on Teachers and Teaching

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PART ONE

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A list of titles in this series can be found at the end of this volume.

International Handbook of Research on Teachers and Teaching

Part One

Editors

Lawrence J. Saha Australian National University, Australia

A. Gary Dworkin University of Houston, USA



Editors Lawrence J. Saha Australian National University Canberra, Australia lawrence.saha@anu.edu.au

A. Gary Dworkin University of Houston Houston, USA gdworkin@uh.edu

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INTRODUCTION TO THE HANDBOOK

INTRODUCTION: NEW PERSPECTIVES ON TEACHERS AND TEACHING

Lawrence J. Saha and A. Gary Dworkin

Why a New Handbook?

The purpose of this handbook is to provide not only an update on research about teachers and teaching, but also to introduce to students, scholars and researchers new perspectives on an important educational topic which has been undergoing considerable change over the past several decades. No one questions the centrality of teachers and their activities for learning processes at all levels of educational systems. However wide variations exist as to how teachers function in educational systems, and also about the various ways in which they carry out their teaching duties. Teachers have been bound with traditional notions of what is required to teach and the best practices for teaching. Also there have been traditional notions of the teacher's role with respect to their administrative superiors, to students and to parents which have been followed over many decades, and across many countries and cultures. However in the last two decades, changes have occurred which have radically altered these traditional notions of teachers' roles or their practices of teaching. New and emerging teacher roles and relationships with educational stakeholders necessitate a careful inspection of what we know about teachers and their practice of teaching. This New Handbook represents a collective effort to examine the results of these changing conditions in education.

The Changing Nature of the Teaching Profession

In traditional settings the teacher occupied a privileged position not only in the classroom, but also in the wider community. The teacher was often the most educationally qualified adult person in the school community, and the teachers' activities were rarely questioned (Lortie, 1975). If students did not do well, it was their fault, and poor performance or failure was seen as a fair assessment of the abilities of the student. The school principals, although in positions of authority, nevertheless gave unquestioned support to their teachers. Student performance was often idiosyncratic to individual schools, and there was an assumption that the assessment of students across schools was more or less equal, and that students who did well in one school would do well in any other school.

The process of teaching and learning has traditionally taken place within a political and economic context where education was considered a public good and the responsibility of the State. Particularly at the primary and secondary levels, it was assumed that the returns to public investment in education would provide far greater returns to society generally. However, as the levels of educational attainment in societies became higher, and as the standards of living continually improved, the cost of education to the State increased to the point where some assurance of value for money could be guaranteed. Furthermore, it also became clear that much of the return for investment to education accrued to the individual in the form of private returns, as compared to public returns. This increasingly became clear at the tertiary level.

As a result of these developments, governments in many parts of the world began to resort to two strategies to minimize the increasing costs of education: (1) to demand greater accountability of teachers and education administrators to ensure more efficient and effective returns to educational investments, and (2) to devolve the costs of education as much as possible to the consumer, either in the form of increasing privatization of educational facilities, and, at the higher education levels, to charge fees to partially offset the costs to the government. Both of these strategies have had significant impact on the role, the social status, and the work conditions of teachers.

To begin with, the privileged status of teachers as professionals began to be questioned. When teachers were among the most educated persons in the community, they enjoyed the social status of a professional. Their decisions went unquestioned, because it was thought that they knew best what was best for children. This status included that of educational administrators, such as school principals, as well. Professional status, from a sociological perspective, implies a certain amount of professional autonomy and independence, and by definition, this professional status is regulated by the profession itself, and not by any outside body.

As a result of these moves toward greater accountability, the independence and autonomy of teachers have become increasingly eroded. Both school principals and teachers have become accountable not to members of their own profession, but rather to government bodies who may or may not have had experience or membership in the teaching profession. The authority of these outside monitoring bodies lies in the fact that they control the financing of education, and therefore they control the jobs and careers of the teachers themselves.

The Implications for Teachers

One of the arguments underlying this handbook is that the changes in the profession and work of teachers have had consequences. Firstly, when the professional nature of an occupation is taken away, so too is it likely that collegiality will also disappear. The increased level of insecurity which is the result of external monitoring is likely to increase the competition between teachers, which also means the greater amount of stress and the decline of a sense of social support. Therefore external accountability, coupled with internal competition, can result in the abandonment of standards so that teachers will teach in a manner that will improve the outcomes which are most likely to favor them. In the context of external standardized exams, this could mean more "teaching to the test."

School principals who are accountable to external forms of evaluation are more likely to be more demanding of their teachers, and have less sympathy for teachers' problems. Principals themselves are also subject of increased job stress and burnout (Friedman, 2002), which is likely to lead to an increased level of teacher stress, and subsequent higher levels of teacher burnout and other forms of teacher disengagement. We know, for example, that school principals who are less authoritarian and more democratic are likely to have fewer teachers who burn out (Dworkin, Saha, & Hill, 2003).

However not all changes are for the worse. The training, credentialing, and continuing in-service programs, along with the development of new educational technological materials have provided teachers with additional high quality resources to enhance their skills and prepare them for increasingly diverse and challenging classrooms. There have been developments in research-based pedagogies and classroom strategies, and the science of teaching, which includes the availability of various teaching materials, that exist at a sophisticated level. Therefore, the contradictions of the present educational climates in many countries of the world have brought about dramatic changes to both teachers and teaching. It is in this context that we feel the present handbook will make an important contribution.

The handbook is divided into two volumes, the first being primarily focused on research on teachers, while the second is focused on teaching. Within each volume, there are a number of subsections which cluster the chapters around a common theme. It is not always easy to draw the distinction between teachers and teaching in the placement of chapters, and occasionally there is some overlap. This is particularly true with the final section of Volume 1, Section 6: Teachers and Teaching in Comparative Perspective. This section serves as a transition between volumes one and two.

The Structure of the Handbook: Volume I – Teachers

Section 1: Introduction to the Study of Teachers

The first volume is divided into six sections, with the final section serving as a bridge between the first volume and the second volume. The first section "Introduction to the Study of Teachers" provides a backdrop for the remainder of the first volume. Chapters in this section locate the notion of the teacher in history, and trace the past and current trends in research on teachers and teaching. Teachers have been the object of research for many decades, but we find in this section that teachers also conduct research on themselves, on their students and on their schools. However, research on teachers and on education generally, has been criticized for not being relevant or useful for policy (Biddle & Saha, 2002/2005). Nevertheless research has also shown whether and how the research knowledge about teachers and teaching actually becomes known, often through the school principals who frequently use it in their day-to-day running of their schools.

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Knowledge about teachers does not speak for itself. In this section we also find an overview of the social science theories which have been used to guide and interpret research on teachers and teaching. Finally, the section would not be complete without some of the latest trends in the quantitative methods which are used for research on teachers and teaching. As these methods become more sophisticated, the quality of research and the quality of our knowledge is improved. Thus, Section 1 provides the base regarding research on teachers and teaching upon which the remainder of the volume rests.

Section 2: Becoming a Teacher

People are made into teachers; they are not born to be teachers. While some may dispute the various characteristics which identify and describe the good teacher, the fact is that the recruitment and preparation of teachers has become a central preoccupation of governments and of the educational institutions which train and certify them. In this section we find discussions of the underlying philosophy and policies which influence the training of teachers. We also find descriptions and discussions about changes in the certification and credentialing of teachers, and in particular how this has shifted from an emphasis on qualifications to an emphasis on performance. In this sense, we see the emergence of increasing accountability of teachers for the outcomes of their teaching. What is also at issue is whether the training process is ever finished. The chapters on in-service training, the role of mentors, and the notion of teachers to stay up-to-date on the latest developments in teaching pedagogies and teaching strategies.

The chapters in this section make it clear that a person has never really become a teacher, in the definitive sense of the word. In the current climate, teachers are always in a *state of becoming*, where new knowledge, new skills, and new classroom challenges are in a constant state of flux. Once again, as this pace of change accelerates, the pressures on teachers to be adaptive, accommodating and yet effective in their work, not only increases accountability, but also on the consequences of accountability.

Section 3: The Characteristics of Teachers

Conventional studies of teacher characteristics have focused on the types of persons recruited to, or attracted by, the profession of teaching. However in the new educational climate, some new characteristics have become important. Status as such is not new, but the nature of this social status is new. Furthermore, the quality of the knowledge, attitudes and values of teachers are now recognized as important dimensions which affect teacher behavior and performance. Finally, the potential for leadership among teachers, because of the changing nature of educational accountability, is essential.

All of these topics are treated in the chapters of this section. In addition, issues related to gender differentiation within the teaching profession are addressed, since many of the characteristics of the teaching profession are affected by gender issues. The authors in this section provide up-to-date reviews of the literature of these important topics.

Section 4: Teacher Behavior

In the new climate of increasing accountability throughout the world, teacher behavior is increasingly being scrutinized. Accountability lies not only in the academic performance of students. Other dimensions of the teacher's behavior are also important, including the teacher's impact on the classroom, the school climate, interrelationships with parents, use of textbooks, the teacher's own beliefs about students, the teacher's emotional behavior, and finally the teacher's relationships with authority. The new accountability affects all of these dimensions. In effect, the teacher lives in a fishbowl, for all to see and to evaluate.

The chapters in this section address issues not found in other handbooks, and therefore many hitherto unexplored aspects of teacher behavior are covered. Researchers and students will find a wealth of insight and information in these chapters, and many new ideas which themselves require further research will make important contributions to ways in which teachers are understood, and need to be understood in the present climate.

Section 5: Teacher Life-Cycles

Like all other occupations and professions, the teaching profession has its own stages, or life-cycles through which all or most all teachers pass through as they work their way through their careers. The chapters in this section describe a number of aspects of these life-cycle stages, starting with the extent to which teachers are "tracked" as they are assigned to different classes. Also the life cycle of teachers is intertwined with the nature of teacher work, and the power and the authority which teachers possess. Their salaries are tied up with unions, and promotions become increasingly complicated because of increasing monitoring and accountability. The increase in pressures on teachers does raise the possibility of burnout and the loss of enthusiasm for their work. Overall these conditions relating to teachers pose issues for both teachers and for administrators, particularly as the demands for teachers increase. These chapters provide important insights and up-to-date information about these aspects of teachers today.

Section 6: Teachers and Teaching in Comparative Perspective

A comparative perspective adds to our understanding of both teachers and teaching, since we have the opportunity of seeing the profession in different cultural and social contexts. The chapters in this section do provide us with this opportunity. Not only do we have overviews of the profession across societies, but we also are able to understand how the major difference between Eastern and Western cultures affect the nature of teachers and the conditions of teaching. The chapters on teaching in Africa and also in Cyprus also provide important comparisons about how different cultural contexts create challenges for teachers. This section forms a bridge between the first and second volumes, as it examines both teachers and teaching cross-culturally, and comparatively.

Volume II – Teaching

It stands to reason that if the career conditions of teachers have changed, and also their attitudes, values and beliefs, then so too will the ways that they teach. There are a number of pedagogies which guide the teaching styles of teachers. In many ways, these are the theories that teachers hold, explicitly or implicitly, which affect all aspects of their teaching behavior. These theories are not only influenced by teacher beliefs about their students, but they are also influenced by their in-school experiences, and these can include the changing nature of work conditions and other sources of accountability, whether these be the external assessment of students, or direct measures of teacher effectiveness (Marland, 1994). It is therefore relevant to give attention to these changing aspects of teaching practice. This is the focus of Volume 2.

Section 7: The Dimensions of Teaching

The chapters in Section 7 highlight the various aspects of teaching which help understand issues related to classroom behavior. The chapters range from an examination of teaching styles, as learned in the process of teacher training, to considerations of how to create productive learning environments in contemporary classrooms in which diversity among students has become an increasing reality. Related to this latter issue are the considerations of justice and ethics in classroom settings, particularly the concerns about the ways that students are assessed and treated by teachers. This section ends with a consideration of a much researched topic, namely the expectations that teachers hold of their students. Even with the abundant research on this topic, there is much more to understand, particularly given the changing nature of teaching conditions.

Section 8: Teaching in the Classroom

Section 8 continues the topic of Section 7, but directs attention more specifically to classroom conditions. The articles in this section focus on more specific aspects of the classroom context, such as the actual interaction between teacher and student, examinations, classroom discipline, the challenge of multicultural classrooms, the size of the class, the impact of new forms of information technology, effective teaching, and finally nonverbal behavior. There are both traditional and new topics found in this section, and all chapters provide new ways of looking at classroom settings and help us understand the new challenges facing teachers.

Section 9: Teaching Specific Student Populations

Not all classrooms are alike, nor are the teaching challenges the same at various age and grade levels. Most teachers will teach students from mainstream society, and although there will be some diversity in every classroom, in some cases teachers will, either by design or by accident, teach various subgroups of young students with highly specific needs. The articles in this section focus on teaching with specific student populations. The section begins with several chapters which focus on various grade levels, and in this case, on secondary school and tertiary student populations. But the section includes chapters on other special groups such as vocational students, gifted and talented children, at risk students, indigenous students, students in single-sex and coed classes, and finally, teaching boys, which, because of higher dropout rates and school disengagement, has become a concern in some countries. Overall, the chapters in this section point to circumstances where special teacher qualities are needed to meet the needs of unique student populations.

Section 10: The Teaching of Individual Subjects

Most handbooks on teachers and teaching have included chapters on the requirements and pedagogical styles needed for teaching various subject areas. This handbook is no different. The conventional fields of mathematics and science are represented, as are reading and history. But there are some more unusual fields which are covered, including arts education, teaching a second language, physical education and health, the teaching of social and political values, and teaching moral and pro-social development. These latter subjects help raise questions about the content of what should be taught in school, and how it should be taught. Even though the focus of much evaluation of school effectiveness is judged by mathematics, science and reading performance, the chapters in this section clearly indicate that these subjects alone do not define the full curriculum of schooling.

Section 11: Great Debates About Teachers and Teaching

The final section in this handbook includes chapters which are more or less open-ended, and which treat topics which are continually debated and remain somewhat unresolved in educational circles. These issues concern the tracking of students, high stakes testing, teacher effects as a value-added phenomenon, educational restructuring, student grade retention, and the professionalism of teachers. All of these topics are contentious and controversial. The purpose of this final section is to emphasize that the general field of teachers and teaching is not a closed book, but that it is an ever-evolving and changing phenomenon.

Conclusion: A New Beginning, not the End

The 76 chapters in this handbook represent an introduction rather than a closed compendium of what we know about teachers and teaching. The field is a large one, and it is always changing as the conditions surrounding the enterprise of education also evolve. What is more important is that as the social and educational context of teachers and teaching change, so do areas and topics for research. Clearly, continuing research needs to be conducted on the teachers and their teaching behavior. But replication and repetition are not enough; new directions are needed to address the complex conditions which are emerging which are radically altering teachers and teaching as both professions and as jobs. Furthermore, change also brings about conflict and stress, and the consequences of these conditions also need to receive research attention.

What is perhaps most important is that these developments regarding teachers and teaching are not unique to specific countries. In many ways they are part of a larger global process whereby education systems participate in similar patterns of institutional structures and educational practices (Spring, 2008). The conditions of teachers and teaching have become common across national boundaries so that uniformity rather than diversity dominates the practices which contribute to the accountability movements which have had such a striking impact. Therefore the audience to which these chapters speak is an international one, and the findings are relevant at both national and international levels. Presumably, the understanding and the research which might be stimulated by these chapters will also have international significance.

Biographical Notes

Lawrence J. Saha is a sociologist of education with 30 years experience in teaching and research. He is Professor in the School of Social Sciences at the Australian National University and a former Dean of the Faculty of Arts. His main areas of educational research are social psychology of education, dissemination of education research knowledge, education and development, and youth political socialization. Professor Saha was section editor (Sociology of Education) and contributor for the *International Encyclopedia of Education*, 2nd edition (Elsevier, 1994), and Editor of the *International Encyclopedia of the Sociology of Education* (Elsevier, 1997). His most recent works are *The Untested Accusation: Principals, Research Knowledge, and Policy Making in Schools* (Ablex Publishing Co., Westport Conn., 2002/2005 pbk, with Bruce J. Biddle) and *Youth and Political Participation* (co-editor, Sense Publishers, 2007). He currently is Editor-in Chief of *Social Psychology of Education: An International Journal* (Springer).

A. Gary Dworkin is Professor of Sociology and co-founder of the Sociology of Education Research Group (SERG) at the University of Houston in Texas, USA and a former chair of the Department of Sociology. Currently, he is Secretary of Research Committee 04 (Sociology of Education) of the International Sociological Association. He has served on the Council of the Sociology of Education section of the American Sociological Association and as President of the Southwestern Sociological Association. His publications include ten books and numerous articles on teacher burnout and student dropout behavior, minority-majority relations and gender roles, and the assessment of school accountability systems. Recently, Dworkin published essays on accountability and high-stakes testing under *The No Child Left Behind Act* in the journal *Sociology of Education (2005)*, in Sadovnik et al., *No Child Left Behind and the Reduction of the Achievement Gap: Sociological Perspectives on Federal Education Policy* (Routledge 2007) and on the unintended consequences of school accountability in the *International Journal of Contemporary Sociology* (2008). He also assessed the effects of retention-in-grade (with Jon Lorence, published by the

Brookings Institution in Washington, D.C., 2002). Dworkin (with Rosalind J. Dworkin) wrote three editions of *The Minority Report*, a race, ethnic, and gender relations book (3rd edition published by Wadsworth 1999). Among some of his earlier books on teachers and teaching are *Teacher Burnout in the Public Schools* (SUNY Press, 1987), *When Teachers Give Up* (Hogg Foundation/Texas Press, 1985) and *Giving Up* on School (with Margaret D. LeCompte, Corwin/Sage Press, 1991).

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Section 1

INTRODUCTION TO THE STUDY OF TEACHERS

TEACHERS IN HISTORY

W. Robert Houston

In antiquity, the middle ages, and up until the mid-1800s in the United States, teachers were almost entirely men. That has changed in the last 100 years; only 30% of teachers are males, and those teach primarily in secondary schools.

The public's appraisal of teachers has reflected their perception of the relevance and effectiveness of teachers' contribution to the future of society. While never well paid, in some periods of history, teachers have been highly honored and respected, while at other times, scorned for their ineffectiveness – a roller-coaster ride with crests and valleys that ushered in new modes of education.

Teachers have been held accountable by those funding them. In ancient Athens, teachers were accountable to the parents of children they were tutoring; monks and priests were accountable to the church in the middle ages; teachers in America by a school board representing their communities. The state and federal governments are increasingly holding schools and teachers accountable for student achievement through legislation, such as *No Child Left Behind* (2001). While the specific regulations will be changed in future years, the trend toward accountability for student learning is likely to define teacher competence, characteristics, and compensation for years to come.

Throughout history, teachers and teaching have tended to reflect the culture and needs of the society in which they were located. In Athens, boys were taught to be productive citizens while in Sparta, the emphasis was on military prowess; Chinese education emphasized the literature of the great philosophers Confucius and Lao-tse.

During the Middle Ages the emphasis was on promulgating religious ideals, and in twenty-first century America, content knowledge and skills have become paramount. Education was and is inseparable from culture and its historic period, is deeply buried in the technology of that period, and is radically transformed when that culture changes.

Expectations of teachers reflect their culture – the extent of their knowledge and skills, their status in the community, and their moral dispositions. In different centuries and different environments, teachers had strong military experience, dexterous writing skills, were philosophically oriented, or exhibited a broad knowledge of history or mathematics. Some were required to be priests or novices training for the priesthood, others male, and others slaves or poor but educated (Houston, 1990).

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In primitive societies, education focused on children learning the mores and practical skills of their tribes by imitating their elders. The curriculum was life experiences and the future of the tribe depended on carrying on traditions that had been successful in the past. There were no formal schools, no teachers; everyone in the village was a "teacher" and children learned by doing. Not all peoples in the world evolved at the same pace; we have learned about the education of ancient peoples in the past century through the observations of primitive societies by trained anthropologists.

Two Environments for Teaching

As civilizations developed and the knowledge/skills base of society became more complex, education became more important. Teachers have functioned in two basic environments: instructing a single person or teaching a group or class of persons.

Throughout history, parents have been their children's first teachers, initiating them into the culture of their tribe or community. Individual instruction occurred in early civilizations such as Greece, Rome, and Mesopotamia as wealthy citizens engaged slaves or employed poor but educated citizens as tutors to teach their children.

By the middle ages, the apprenticeship system had become the major approach to staffing trades and preparing future craftsmen. An apprentice learned a trade on the job by working for a master craftsman. Master craftsmen taught apprentices by showing them what to do then observing and correcting them. Apprentices first engaged in menial tasks, extending their skills as they became more proficient and the master craftsman gained greater faith in their ability, until they were able to ply their craft independently as artists, jewelers, painters, blacksmiths, wagon makers, or chefs. In the Twenty-first Century, tutors or mentors work with individuals in the workplace, community centers, schools or the home, providing individualized instruction.

The second and more traditional environment for teaching involves a group of students. As civilization began to develop, some parents wanted their children to have knowledge and skills beyond that of peasants, servants, and the "common people." From the early stages of Chinese, Greek and Egyptian civilization, some members of society have been designated as teachers, but their responsibilities, status in the community, remuneration, and teaching assignments have varied widely and evolved throughout history. The evolution to what teachers are today forms the major part of this essay.

Education and Culture

Although Athens and Sparta spoke the same language and were geographically close together, their culture, values, educational system and teachers were very different in 500–300 BCE. The purpose of Athenian education was to prepare boys as citizens who were trained in the arts. Girls were not educated in a school, but many learned to read and write at home. From ages 6 to 14, boys attended a nearby primary school.

Books were rare so teachers read passages, then the students repeated the passages until they were memorized. Teachers taught two subjects: the works of Homer and how to play the lyre. Teachers also could choose to teach other subjects (e.g., drama, art, reading, writing, math, public speaking).

Sparta and Spartan education was very different. The city-state was militaristic and the purpose of education was to develop a well-drilled, well-disciplined army. Boys entered a military school at age 6 or 7, living in a barracks with other boys. School was designed to develop skills needed by soldiers, and while they learned to read and write, those subjects were less important. By the age of 18–20, they were required to pass a rigorous test of their physical fitness, military knowledge and skills, and leadership. Their teachers were men with military experience who lived with them, even if the teachers were married and had families. Life for teachers was focused on developing a military force.

Throughout history, practices of the past have been embedded in current practice. As mediaeval civilization became increasingly more complex, teaching methods and educational institutions developed of a "different and highly original kind. Yet even at the height of the thirteenth century the memory of the ancient models, and a desire to imitate them, continually haunted the minds of the men of the time.... But above all it was the Renaissance of the fifteenth and sixteenth centuries which left its mark on our education by its conscious, intentional return to the strict classical tradition. Today, to a much greater extent than is commonly realized, we are still living on the humanist heritage" (Marrou, 1956, p. xii).

Influence of Gender on Teaching as a Lifetime Profession

Teachers initially were males, whether they taught as slaves or free men in Athens in 400BCE or were priests teaching young men studying to enter the priesthood in the Middle Ages. Until the late nineteenth century, teaching was considered a part-time and short-term job. Young Greek teachers accepted employment as teachers or tutors for a few years until they were able to establish themselves in their lifetime career. Women in the nineteenth and twentieth centuries taught for a few years before marriage and children – teaching was considered "insurance" against future disasters (e.g., death or severe injury to spouse; economic problems). Because the school year was defined by the agricultural calendar, it was primarily a winter activity, and considered to be temporary work. Fewer than 5 % of teachers taught more than 5 years.

By the mid-1800s in the United States, women had become the predominant teacher group as the men worked in fields and factories or during the American Civil War, served in the military. By 1888, 63 % of teachers in America were female, primarily adolescents and young women. Laura Ingles Wilder represents many teachers at the turn of the Twentieth Century; at age 15, she had completed the eighth grade, passed an oral test of knowledge, and taught math and reading to the children in their community while living with a school board member (Wilder, 1941).

During the Nineteenth Century, women turned to teaching as their only viable vocation other than nursing and marriage. One-in-five Massachusetts teachers taught

at some time in their lives (Altenbaugh, 1992, p. 9). The ready availability of females as teachers resulted in an oversupply of teachers that greatly depressed salaries, resulting in reduced local school district costs.

In metropolitan areas, schools were structured primarily using the industrial model, with women teaching classes in primary and elementary schools, and students progressing from grade to grade to graduation. Men taught in high schools, were paid higher wages, and were preferred by Town Councils that considered them more effective (Altenbaugh, 1992, p. 8).

Beginning in the 1930s, males made up only about 30% of the teaching force, a ratio that has remained constant for the last 75 years (Clifford, 1989; Sedlak & Schlossman, 1986). Educational preparation became more rigorous, school calendars extended, salaries increased although still low, professional associations such as the National Education Association and the American Federation of Teachers strengthened, and teachers began considering themselves members of a profession.

While many teachers still have second jobs during the school year and full-time employment during the summer, teachers considered themselves "teachers." Of the 3.2 million public school teachers in 2003–2004 in the United States, 84% remained at the same school, 8% moved to a different school, and 8% left the profession during the following year (Marvel, Lyter, Peitola, Strizek, & Morton, 2007, p. 7). Those teachers younger than 30 were more likely to leave their position; 15% moved to another school and 9% left teaching (Marvel, Lyter, Peitola, Strizek, & Morton, 2007, pp. 8–10).

Every Hundred Years...

The responsibilities and background of teachers changes with the needs of society. Teachers in Greece and Rome differed from those of the middle ages in their backgrounds, motivation to teach, processes of instructing students, and organizational unit in which education transpired. Teachers over the past three hundred have continued to be impacted by societal, political, and industrial changes.

Since the American Revolution in 1776, education has experienced three major transitions around the turn of each century (Parkerson & Parkerson, 2001). Each was triggered by dramatic changes in the social, political, and economic conditions that characterized America. Each was preceded by intense criticism of teachers and schools, led to major changes in schooling, and emerged with increased support by the public.

The first transition was triggered by the American Revolution, occurred around 1800, and promoted the values of patriotic nationalism, competition and achievement. By the mid-1800s, universal public education through the *common school* movement had expanded schooling to a much greater proportion of the population, greatly increasing the number of teachers needed.

The industrial revolution and urbanization of the nation by the end of the nineteenth century changed education to the *graded school*, based on the factory assembly line and the corporate model for management. Teachers were criticized for their lack of education and understanding of the industrial model. Schools were reorganized to reflect industry,

with grades, standard textbooks, and specialized teachers. Teachers were required to attend "normal schools" to be properly prepared to deliver the appropriate curriculum in the appropriate manner.

As the Twentieth Century drew to a close, teachers and schools were criticized because students were not performing as well on standardized tests of knowledge as those in other developed countries. Standards were implemented for both students and teachers, who were required to pass tests for graduation or certification. Schools began to be evaluated on the basis of the proportion of their students passing state achievement tests in mathematics, reading, and other content areas. The validity of the formal graded school and its program was questioned because of the number of school dropouts and low levels of achievement.

Charter schools and alternative teacher education programs were promoted and based on a wide range of ideas and conceptual models of education. *Flexibility* became the basic descriptor of schools and teachers in this third transition. Traditional schools redesigned their organization with multiple curricular choices and smaller units in larger schools, longer periods of instruction each week, and teachers certified on the basis of tested knowledge of content.

Teachers and the Evolution of Technology and Communication

Effective teachers draw on the most advanced technology and communication tools available to them. For the most primitive tribes, this entailed demonstrating a skill they expected the younger generation to master. Children and youth practiced the skill over and over until its mastery was assured. These included hunting and fishing, cultivating the soil, building shelters, and defending oneself from enemies – survival strategies passed from one generation to the next. While initial education was by parents, the tribe served as teacher for survival of the community depended upon the knowledge and skills of subsequent generations. Stories and fables became the accepted media for teaching the young about their history as the oral tradition became more widespread.

About 3000 BCE, written languages were developed in the Middle East and India. Cuneiform and clay tablets in Mesopotamia, papyrus in Egypt, and parchment in Rome not only extended the importance and use of visual records, but also expanded the teachers' responsibility and needed expertise. Boys from privileged families and priests were taught to read and write so as to be able to keep records of laws, religious beliefs, and business transactions.

Instruction was simple and direct. The teacher first taught his students how to hold writing instruments (stylus or calamus) correctly and how to construct elementary symbols, then he gave them a model to copy and reproduce. The work was simple in the beginning, but gradually became more complex. Students memorized long passages from their books by repeating them over and over. Oral instruction complemented written exercises; the teacher read a text, commented on it, and then questioned students about it.

With the advent of the printing press in the Middle Ages, written documents became more widely available, and reading and writing not only were critical for teachers, but became basic skills taught to children and youth. The textbook became the central focus of education, with the teacher clarifying content in texts. By the beginning of the twentieth century, the most common media was the blackboard and, a 100 years later, the "white board." By the end of the twentieth century, technology based on electronic innovations became more available and standard in schools (e.g., computers, electronic games, distance learning, and communication systems).

Tools of a teacher evolved from oral traditions to textbooks and blackboards, to films and slide tapes, to laptop computers, worldwide web, television and instant world communication, digital cameras, and multimedia training devices. With each evolution, the roles of teachers, their relations with the world and their students, and the specificity and complexity of standards used to define their responsibilities became more rigorous and specific. Teachers have tended to be more effective when they use the most modern technology (whether oral ballads or laptop computers).

Effects of Accountability on Teachers

In ancient times, teachers or tutors were employed by families to educate their children. All were accountable to the family whose children they were teaching. The master of the household could fire an unsuccessful tutor or send a slave to work in the fields, work as a manual laborer, or serve in the army if they were ineffective teachers. Teacher accountability was individualized and specific.

As education became more commonplace, the community began to employ teachers; and teachers became accountable to them, typically through a board representing the city or village. With the American Constitution, each state was responsible for educating its children and implementing criteria for certifying teachers. Institutions (universities, school districts, and private agencies) were commissioned and authorized to prepare teachers by each state, but final authority for certification rested with the state. Criteria for certification have become more structured, specific, and rigorous as the number of students increased, school systems became more remote from the people they served, and as preparation programs were criticized for the quality of their preparation.

States tightened their requirements for teacher certification, including requiring bachelors' degrees by the early 1950s in all states and masters degrees in some. In 2001, Congress passed *No Child Left Behind* legislation that specified that all children deserved a quality education and held schools and their teachers responsible for educating *all* children in America. *Education Week* concluded that secondary students in high poverty schools were twice as likely as those in low-poverty schools (26% vs. 13%) to have a teacher who was not certified in the subject taught (*Education Week*, 2003). Criteria shifted from process indicators of quality teaching to the outcomes of teaching, from number of hours of college courses to passing state-mandated achievement tests, from a broad-based school curriculum to one focused on math, reading and language, and academic content fields such as science and history. The number and proportion of music, art, and business teachers decreased as a result. As results of state achievement tests for each school are reported in newspapers and school effectiveness judged on the basis of test results, teachers spend more time on the specific content areas being tested and more energy on drill with test formats.

Importance of Content Knowledge

The evolution of teachers is not a linear path, but a twisted road. Through the centuries, knowledge was lost or forgotten, only to be rediscovered centuries later. Algebra and the zero were reintroduced by scholars from the Middle East (as well as the Hindu-Arabic numeral system that replaced Roman numerals); copies of scriptures by Irish monks expanded and corrected Biblical passages; scientific principles such as the earth orbiting the sun – all lost at one point were rediscovered centuries later. During the Middle Ages, as decadence and barbarism characterized Western society, few scholars survived, and teachers who had mastered the mysterious secret of reading and writing became influential and sought after.

The emphasis in schools and on teachers has shifted with political and world events as well as scientific and cultural discoveries. Patriotism becomes more important in war time; science when another nation makes remarkable progress (e.g., Russian satellite, Sputnik, in 1957); following a major disaster or important event (e.g., World Trade Center disaster on 9/11; presidential election); and increased attention to achievement test scores and school accountability (e.g., global economy and international mathematics achievement). With each shift in emphasis on education, (e.g., need for well-trained priests in the Middle Ages, humanitarians and Greek scholars in the Renaissance, and content specialists today), needed teacher expertise and experience has shifted its emphasis.

From about 500–1000 AD, many teachers taught upper-class young men the manners of court, how to ride horses, and how to fight to prepare them as knights. Other teachers were monks in parish churches or monasteries. They taught church music and reading and writing Latin to prospective priests. Lower class boys were apprenticed to a master craftsman.

The European Renaissance led to a desire for a well-rounded education, including humanities, classical Greek and Latin. European schools continue this tradition to this day, and teachers are assigned to schools based on their knowledge of humanities and science.

Three recent Congressional acts have profoundly affected the character and quality of teachers in the United States. In 1944, the GI Bill of Rights encouraged returning servicemen to attend college and paid them to do so. Thousands of men and women who otherwise might not have sought higher education did so, and many became teachers. In 1958, Congress passed the National Defense Education Act to provide funds to promote science, mathematics, and foreign language instruction. In 2001, the *No Child Left Behind* act defined the population to be educated as *everyone*, and held teachers and schools accountable for accomplishing this mandate.

Such legislative actions are embedded in "this nation's ambivalent regard for its teachers. On the one hand, we go to the outer reaches of oratorical excess in heaping praise on the Teacher of the Year... On the other hand, only parents of first-generation college students rather consistently view teaching as a proper career for their offspring. Many other people regard teaching as a noble calling – for somebody else" (Goodlad, 1990, pp. 69–70).

Expanded Employment by Teachers

As society and technology have become more complex, the educational needs of people have increased. No longer is an elementary or high school education sufficient. Businesses and industries sponsor advanced seminars to educate their employees, even those with doctoral degrees, to keep their knowledge and skills current in a rapidly changing "knowledge-intensive" society. These agencies provide a new and expanding role for teachers. No longer is a "teacher" automatically assumed to be employed by a school or university; now, many work with adults in human resources departments, private educational companies, and governmental offices (Houston, 1986). In 1983, the number of full-time corporate teachers in the United States was 213,000 with an additional 786,000 engaged part-time (Zemke, 1983). Many of these had previously taught in public or private schools, a year after they resigned from a school, 29% of former teachers were still employed in the field of education but not in a public school and 12% were working in an occupation outside the field of education (Marvel et al., 2007, p. 15).

Because education is so vital for continued advancements in the global, technology-rich era of the Twenty-first Century, the numbers of teachers are increasing at the same time their roles and teaching strategies are changing, becoming more complex and specialized, and expanding.

Biographical Note

W. Robert Houston is John and Rebecca Moores Professor and Executive Director, the Institute for Urban Education at the University of Houston. His major contributions have been in teacher education, most notably in competency-based teacher education in the 1970s and 1980s. Author of over 43 books and hundreds of journal articles and research papers, he was Editor of the first *Handbook of Research in Teacher Education*, named the outstanding book in teacher education in 1990. In 1997 the Association of Teacher Educators named him the first *Distinguished Educator of the Year* and in 2002, he received the prestigious *Pomeroy Award* from the American Association of Colleges for Teacher Education for his contributions to education. Prior to joining the faculty of the University of Houston, he was a teacher and elementary school principal, earned the doctorate at The University of Texas-Austin, and was on the faculty of Michigan State University.

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TRENDS IN RESEARCH ON TEACHING: AN HISTORICAL AND CRITICAL OVERVIEW

Margaret D. LeCompte

Introduction

Teaching and learning are complex, highly diverse, and frequently individualistic phenomena. That complexity poses a major dilemma in educational research: Since educational phenomena typically are poorly understood, investigating them requires insights from multiple disciplines using multiple kinds of research designs. Further, researchers must thoroughly explore their internal and external characteristics currently, over time, in multiple settings, and with different kinds of teachers and learners. It is difficult to achieve this type of detailed and careful exploration because framing educational problems in terms of complexity pits educational research against political realities. United States' educational culture, and – by extension – all educational systems influenced by the United States, whether directly through foreign aid, or indirectly through the work of United States' based educational consultants and United States' dominated non-governmental organizations and international organizations, have focused on quick fixes and universal solutions. This makes problematic the serious consideration of difficult problems and long-term solutions. It pushes research in education to emphasize products or outcomes (measured in terms of academic achievement and student test scores) directed at identifying short term solutions to what have been defined as single – albeit complex – problems. In part this preference may be driven by a prejudice toward experimental designs that require single causes and favor unambiguous effects; it also may be a function of the technocratic and impatient nature of United States' culture, which permeates every aspect of the educational system. United States' culture is reluctant to frame social problems in complex, multi-facetted ways and even more reluctant to view education as an expensive venture, worthwhile at least as much because of its contribution to social justice and the overall common good as because of its contribution to the economy.

In this chapter, a distinction is made between educational research, done primarily by investigators *in* the field of education, and research *on* school systems and educational phenomena, carried out by researchers in the social and behavioral sciences more broadly. The former is focused primarily on the acts of teaching and learning by teachers and students; its context is narrowly construed as the classroom itself.

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The latter examines the overall context of teaching and learning, from local social, political, and economic influences on the school and classroom, to macro-structural forces affecting the purposes and directions of school systems. The chapter begins with a discussion of the historical origins and content of both bodies of investigation; compares research sponsored by gatekeeping organizations in the educational establishment to research done outside of it, and then provides a general critique of the status of research activity and directions in the late 1900s and early 2000s.

The Origins of Educational Research and Measurement

Educational research had its inception in both the "mental measurement" efforts of the 1930s and the Scientific Management movement of the 1920s and 1930s. These efforts, embodied in both effectiveness and accountability efforts, have dominated what commonly is thought to be research on teaching and learning from the 1930s to the 1970s. The development of so-called intelligence tests and tests of knowledge acquisition were driven by psychologists and psychometricians; their existence made it possible for schools to assess whether or not students were actually learning what was being taught. Demands for accountability also focused on educational outcomes, but primarily in order to assess the effectiveness of investments in school systems and their efficiency in imparting to students knowledge and skills needed for success in the work force.

Considerable controversy has existed over whether or not what tests measure actually is what should be taught, or whether tests – or any measures – actually can measure the intangibles of an educational experience. These controversies persist. Further, researchers argue over the best, or even the most appropriate, way to investigate issues of teaching and learning. Notwithstanding, standardized norm-referenced and criterion-referenced tests now constitute the "gold standard" for student achievement or outcome data, and investigations of student achievement and how to improve it still constitute the bulk of educational research – especially if state mandated districtwide achievement tests are considered.

The bias toward logico-deductive studies and experimentation has been facilitated by the training of educational researchers. Most were, and are, university faculty members with backgrounds in the behavioral sciences and psychology whose disciplines and predispositions favor experimental and quasi-experimental investigation. Consciously or not, these researcher trainers downplayed – and even denigrated as lacking in rigor – other forms of research.¹ They passed this bias on to their students, notwithstanding that sociologists, historians, anthropologists, economists and political scientists also have been doing significant research on educational issues and in educational settings, about schools, teachers and students, and in and out of schools since the 1930s. This work included survey research, which generated much of what is known about the characteristics and attitudes of teachers, students, and parent groups; assessments of school climate; descriptions of the teaching profession, teacher training and organizations; a wealth of systematic observational research

¹Though it should be noted that psychology did provide models that could be adapted to more observational work – the clinical case study and the child study movement.

in classrooms (see Jackson, 1968; LeCompte, 1978); hundreds of ethnographic and case studies concerned with the dynamics of classrooms, schools, and school districts (Gordon, 1957; Grant, 1989; Rogers, 1968); content analytic studies of instructional materials that established a divide between instruction for the affluent and the poor (Page, 1989); historical discussions of school organization (Katz, 1971), curriculum (Anyon, 1980), teacher training and development (Eddy, 1969; Newman, 1980), the development of school systems, and investigations of parent groups, student peer groups and their interactions with each other, teachers, and other educational stakeholders (Adler & Adler, 1991; Eder, 1985; Philips, 1983; Wax, Wax, & Dumont, 1964). Such studies did not, however, find a ready audience among educational researchers and in schools of education - the venue in which most educational researchers are trained - where the focus was more strictly on improving and assessing teacher quality and effectiveness in imparting content knowledge to students. Thus, two separate strands of research evolved: One, inside the teacher training establishment, was sanctioned and supported by the American Educational Research Association, the principal professional organization for professors in teacher training organizations. The other, outside of teacher education, existed within the social and behavioral science disciplines more broadly, as studies of educational phenomena, their participants, and their activities in teaching and learning. In the next few paragraphs, the role of the AERA is described.

Gatekeeping: The Role of the American Educational Research Association

In the early 1960s, the American Educational Research Association published the first Handbook of Research on Teaching (Gage, 1963) as a corrective to much of the educational research done prior to the early 1960s. Characterizing that research as ill-conceived, messy, and often a-theoretical, the Handbook contributors criticized its non-neutral, applied concern with improving not only schooling, but society itself, and hoped to establish itself on the high ground as a gatekeeper with regard to legitimacy and rigor in research on teaching. In particular, Campbell and Stanley's classic article, "Experimental and quasi-experimental designs in educational research," set the gold standard for what the educational establishment considered to be legitimate educational investigation. There followed two decades of focus on positivistic and logico-deductive approaches (discussed in the following pages); it has been embodied in publications by the American Educational Research Association (AERA), including seven quarterly journals, occasional "state of the art" handbooks, and a yearly edited volume addressing current issues and hot topics in education - Review of Research in Education. The AERA has tended to "speak for" the field of educational research because of the pre-eminence of its publications and their wide dissemination to educators, teacher educators, policymakers and educational researchers, notwithstanding that these publications often omitted work that was done from other disciplinary perspectives, explored different aspects of teaching and learning, or utilized different research designs and methods.

AERA's behavioral and logico-deductive emphasis and its privileging of experimental and quasi-experimental research, standardized observational protocols and
systematic, structured surveys gave way slightly in late 1970s and 1980s to a period when AERA began, if not actually favoring them, to at least grant legitimacy to descriptive, naturalistic, and qualitative research, as well as case studies or ethnographies. In the late 1990s and early 2000s, the pendulum in government policies and governmental funding for research, but not necessarily in the journals and conference presentations of AERA, again swung back toward a singular emphasis on experimental designs and randomized field trials – whether or not such designs were practicable or even ethical in normal educational settings (see, e.g., Title 5 of the US Code of Federal Regulations Section 46, which spells out the "common rule" for ethical treatment of human participants in research).

This chapter describes the evolution of research on teaching and teachers from both inside and outside perspectives. As noted above, the "inside" view is a psychological one, focused on assessing and improving teaching so as to enhance student learning. The "outside" view concentrates on everything else: Characteristics of constituents and participants in schooling; socialization and interactions of teachers and students; role requirements and career development of professional teachers; the impact of social class, cultural, racial, ethnic, gender, and linguistic differences on teaching and learning; the nature of educational organizations and control structures; school politics and economics; the nature of teachers' work, and so on. In fairness, the AERA publications, especially the journals with their shorter timelines, have slowly accommodated to and begun to publish works informed by the disciplines and utilizing alternative designs; as is discussed later, the last edition of the Handbook, which attends to this research, is a radical departure from the first. However, the heuristic of inside and outside strands in research does serve to highlight influences on and change in educational research and makes it possible to discuss methods and designs used in both strands of research on and in education, periodic swings between replicable, highly controlled and often experimental designs and more process oriented, descriptive, and naturalistic studies, as well as the topics or issues that have served as catalysts for change.

Research from the "Outside"

Research on education from disciplines outside of the field of education itself addressed different issues. Social scientists in anthropology, political science and sociology focused on observational studies of student and teacher behavior, the political and structural dynamics of school systems (Rogers, 1968; Peterson, 1976), organizational analyses of schools (Waller, 1932), socialization to the role of teacher and related activities in which teachers might engage, such as unionization (Fuchs, 1966; Leacock, 1969); survey analyses of student and teacher characteristics, and the relationships between educational achievement and occupational attainment (Sewell & Shah, 1977; Sewell, Haller, & Portes, 1969).

In addition, anthropologists and community sociologists (Hostetler, 1967; Hostetler & Huntingdon, 1971; Lynd & Lynd, 1929; Peshkin, 1978; Vidich & Bensman, 1958) had always studied schools and educational experiences as an integral aspect of the

transmission of culture in community studies. Schools, as well as non-formal educational experiences and rites of passage, along with families, churches and other organizations, were critical to ensuring the socialization of new generations to norms and values of previous ones. Some ethnographies, in particular the extensive and well-known Holt, Rinehart and Winston series of monographs edited by George and Louise Spindler, focused specifically on the education of children in urban areas, villages and communities in many countries, including highly diverse communities in the United States. These monographs and other books and articles also raised questions about the degree to which children from non-mainstream or whitestream backgrounds - those with cultural, linguistic and racial differences - were being adequately educated in public schools. Some vividly portrayed the negative impact of public schooling on racial minorities (Ogbu, 1974, 1978; Philips, 1983; Rist, 1973; Rosenfield, 1971; Wax et al., 1964) All of these works remained, however, somewhat marginal to educational research in general until the 1970s and 1980s, when growing awareness of cultural diversity among learners in US public schools brought them into the spotlight as models for looking at cultural differences in learning and achievement. The need for research designs used by anthropologist and sociologists case studies and ethnographies, in depth survey interviews, etc. – became especially obvious as research began to show that teachers treated children differently based on their ethnicity and race (Rist, 1973), social class and language fluency. These differences adversely affected the achievement of minority students, girls (Sadker & Sadker, 1988), and second language learners in ways that violated notions of equal and equitable treatment in schools. However, these differences in treatment were subtle and could not be teased out without fine-grained observational analysis of verbal and non-verbal behavior, interaction, and attitudes. Such research required naturalistic, observational research.

Sociologists, by contrast, were more interested in schools and classrooms as social or formal organizations, the nature of work in schools, the characteristics of teachers and students, the relationship between schooling and status attainment, and, like anthropologists, the role of schools in the politics and dynamics of communities (Lynd & Lynd, 1929; Peshkin, 1972, 1978; Vidich & Bensman, 1958). Early organizational studies included Willard Waller's (1932) comprehensive analysis of schools which examined the interrelationships among teachers, students, community leaders, and even the janitors; Parson's (1959) study of the organization of classrooms; Bidwell's (1965) analysis of the school as a formal organization, Roger's (1968) analysis of the bureaucracy of the New York City public school system and the Abt Associates sponsored studies of small rural schools. Such studies have continued, but they remained the province of sociology until they began to shed light on the organizational constraints that doom most school reform initiatives to failure. At that point, a rapprochement developed between educational researchers interested in student achievement, and social scientists interested in organizational dynamics, because the latter often were instrumental in preventing improvement in the latter. Thus, research designs and methods common in anthropology and sociology began to be used by educational researchers as it became clear that without them, key problems of process and complexities in education could not be investigated.

Yet another stream of research looked at the teaching profession, examining it in comparison to other occupations with similar status positions and task characteristics, including nursing and social work (Etzioni, 1969), in terms of its place within the status and work roles of schools in general (Lortie, 1975), and regarding the nature of work that teachers do (Apple, 1978; Apple & Weis, 1983; Connell, 1985; Cuban, 1984; Ginsburg, 1988). These studies addressed the concerns of teachers, who increasingly felt the sting of disrespect from the public, policy makers, and even students.

The Slow Introduction of "Qualitative" Research and the Broadening of Research Foci

For the most part, these works appeared in disciplinary journals (e.g., the American Journal of Sociology, Sociology of Education, Anthropology and Educational Quarterly) not AERA publications, and they were not well known by teachers and teacher educators. Further, since it was argued that they did not follow the canons for rigor and experimental control demanded in schools of education, they were not accorded the same esteem as work published by AERA. However, as it became obvious that input-output studies of innovations would not provide answers to questions about why reform in schools so often failed, they began to achieve more importance. Up to the early 1970s, schools had been treated by educational researchers as "black boxes" into which educational resources entered and educational outcomes exited. Outcomes were measured, but little information existed as to what had happened inside. What brought together the social and behavioral sciences in educational research was the fact that educators from behavioral sciences needed designs and methods from the social sciences in order to answer crucial questions about how schools did or didn't work, why the best-intended efforts of teachers often failed, and why students were not succeeding at desired levels.

The Impact of Federally Funded Evaluation Research

From a design perspective, among the first places that this realization occurred was during the push for accountability in the use of federal funds for education during the late 1960s and early 1970s. The 1965 Elementary and Secondary Education Act mandated that all educational reform activities be built upon evaluation data. In a prophetic comment in the 1973 second *Handbook of Research on Teaching*, Green et.al., quoting Provus (1969), argued that this mandate "may prove to have greater impact on education than the Act itself." Green et.al. go on to describe that impact: "Individuals trained in the scientific method would be likely, at first glance, to applaud the wisdom of basing policy decisions on sound evaluation. The evident suggests, however, that rather than transforming what was once political to an empirical base, the reverse is actually occurring. The scientific method as applied to program evaluation is slowly becoming a political process" (Provus, 1969, p. 623).

In addition to politicizing the research process, of interest for this chapter was the Act's requirement that most federally funded educational projects include both product (outcome) and process (implementation) data. Sometimes called the "ethnographic component" in these evaluation studies, process evaluation filled a gap between pre-and post-testing by describing and assessing what happened *during* implementation of innovative programs. Process data began to address long-unanswered questions regarding *why* innovations were or were not successful, rather than simply indicating that objectives were or were not achieved. These federally-funded studies highlighted the need to engage in educational research that either blended both quantitative (test scores and survey responses) and qualitative (observational and content analytic) methods, or focused on in-depth qualitative investigation alone. They also pointed to the need for a different conceptual framework to explain results, ones that included so-called emic, insider, or participant perspectives, as well as insights framed in terms of the dynamics of institutional and community cultures. Many of the researchers who carried out the process evaluation studies were sociologists and anthropologists; in 1981, the Anthropology and Education Quarterly, which had been publishing articles on how to combine ethnographic and quantitative data since its inception in the early 1970s, published an article touting the complementarity of qualitative and quantitative methods (Fry, Chantavanich, & Chantavanich, 1981). In an indication that AERA had begun to notice the need to legitimate other research designs, the Educational Researcher published Robert Stake's (1978) article, in which he argued for the use of what he called a "breakthrough" design: case study methodology. The third Handbook of Research on Teaching (Wittrock, 1986) published Frederick Erickson's "Qualitative Methods in Research on Teaching," and at the 1986 annual meetings, a significant number of presentations utilized, and discussed the legitimacy of, qualitative and ethnographic research. By this time, several volumes had been published describing how to do ethnographic and qualitative research in education and evaluation (Bogdan & Biklen, 1982; Dobbert, 1982; Goetz & LeCompte, 1984; Patton, 1980), and as a consequence, change in the both publication record and the legitimacy accorded to non-experimental research came quickly.

A Political Sea-Change

Significantly, the epistemological and conceptual shifts in AERA coincided with movements in the opposite direction in the national political arena in the United States. Starting in 1980s, the predominance of conservative and neo-liberal politicians and policy-makers, as well as the proliferation of ideologically conservative and business-oriented "think tanks" began a campaign to convince the public that America's schools were not only failing to educate students adequately, but also were endangering national security, US global supremacy, and the very fabric of the nation. Report after direly named report from so-called "blue ribbon committees" described "A Nation At Risk (1983)," "A Nation Prepared" (Carnegie Task Force on Teaching as a Profession, 1986), "Turning Points: Preparing American youth for the 21st century" (Carnegie Council on Adolescent Development, 1989)," and "Tough Choices or Tough Times" (National Center on Education and the Economy, 2005). All of these reports turned away from examinations of systemic problems affecting

student failure and emphasized instead the need to increase standards, get tough on teachers and students, and impose accountability measures to make sure that taxpayers were getting their money's worth from their investments in education. Gone were the notions that compensatory action was needed to catch students in need up with those who were more privileged. The impetus for such action was ideologically driven; remarkably little of this effort had any real research evidence to substantiate its effectiveness. The impact on educational research was to shift public attention and funding away from micro-oriented explanations of processes and back toward what was called "scientific research," a purposely narrow definition limited to "reliable, replicable studies" – AKA controlled experiments and randomized field trials.

Once again, what was occurring in the universities was at cross-purposes with the political environment, because the period following publication of the 1986 Handbook introduced educational researchers to interactionist and critical research and analyses from Europe (Apple, 1978), the socio-historical theories of Vygotsky (1978a, 1978b) and of socio-cultural activity theory in learning (Lima & Emihovich, 1996; Moll, 1990; Wertsch, 1985) and constructivism approaches to teaching and learning, all of which posited a need for observational research on small groups and communities of learners (Lave & Wenger, 1991; Rogoff, 1998, 2003) in curriculum design. Further, with the publication of Sarason's new edition (1992) on systemic reform in school systems an entirely new group of researchers began to look not only at how whole schools can change (Grant, 1989; McQuillan, 1997; Muncey & McQuillan, 1996; Sizer, 1984) but also at the impact of teacher attitudes and beliefs on teachers' capacity to initiate change and participate meaningfully in curricular and systemic reform.

Mismatches between what goes on in the university research realm and what happens in the public arena are not new, of course, but they have seldom been so closely linked by public funding and an increasingly powerful role of the federal government in local educational affairs – a role which is new historically for the United States and at variance with prevailing and constitutionally sanctioned local systems of control and funding for public education. The impact of these changes – and mismatches – is discussed in the pages which follow, beginning with Table 1.1, which displays the evolution of the topics covered in AERA's state of the art *Handbook* series.

Gatekeeper Pronouncements on the State of the Art: The AERA Handbook Series

Edition One

The editor of the first edition, N. L. Gage (1963), took as his charge the improvement of "the conceptual and methodological equipment used in research on teaching," (Gage, 1963, p. v) by summarizing and integrating the previous 50 years of educational research. The editor sought to divide concerns by grade level and subject matter, leaving wide space for "other chapters" including historical, philosophical and theoretical issues, as well as more chapters on methodology (p. viii). Edition one

Edition and date	Major section titles	Methodology topics
First edition (Gage, 1963)	Theoretical orientations Methodologies in research on teaching Major variables and areas of research on teaching Research on teaching various grade levels and subject mat- ters	Statistics as an aspect of scientific method in research on teaching (Tatsuoka & Tiedeman) Experimental and quasi-experimental designs for research on teaching (Campbell & Stanley) Measuring classroom behavior by system- atic observation (Medley and Mitzel) Rating methods in research on teaching (Remmers) Testing cognitive ability and achievement (Bloom) Measuring noncognitive variables in research on teaching (Starm)
Second edition (Travers, 1973)	Introduction Methods and techniques of research and development Research on the teaching of school subjects	 research on teaching (Stern) The use of direct observation to study teaching (Rosenshine and Furst) Techniques of observing teaching in early childhood and outcomes of particular procedures (Gordon & Jester) The assessment of teacher competence (McNeil & Popham) Instrumentation of research in teaching (Holland & Doran) Issues in the analysis of qualitative data (Light) Pitfalls in research: Nine investigator and experimenter effects (Barber) Instrumentation for teaching and instruction of the context of the contex
Third edition (Wittrock, 1986)	 Theory and method of research on teaching Research on teaching and teachers The social and institutional context of teaching Adapting teaching to differences among learners (intellectual, creative and gifted, bilingual and mildly disabled) Research on the teaching of subjects and grade levels 	 Paradigms and research programs in the study of teaching: A contemporary perspective (Shulman) Philosophy of research on teaching (Fenstermacher) Measurement of teaching (Shavelson, Webb, & Burstein) Quantitative methods in research on teaching (Linn) Qualitative methods in research on teaching (Erickson) Observation as inquiry and method (Evertson & Green) Syntheses of research on teaching (Walberg) Theory, methods, knowledge and research on teaching (Biddle & Anderson)

 Table 1
 An analysis of the American Educational Research Association's handbooks of research on teaching

(continued)

Table 1 (continued)

Edition and date	Major section titles	Methodology topics
Fourth edition (Richardson, 2001)	 Foundations – Frameworks: Traditional approaches to research on teaching (Floden) – Research on teaching at the margins – Ex(centric) voices (Hamilton & McWilliams) Methodology (with special section: Special topics in qualitative methodology – The philosophical issues (Howe, 2001) – Changing conceptions of culture and ethnographic research (Eisenhart) – Narra- tive research on school prac- tice (Gudmondsottir) – Validity (Lather) Mixing social inquiry methods (Greene) Teacher assessment (Porter, Youngs, & Odden) Practitioner research (Zeichner & Noffke) Subject matter The learner Policy Teachers and teaching: Social and cultural contexts and the role of the teacher Instruction 	 Critical issues, current trends and possible futures in quantitative methods (Crawford & Impara, 2001) Paradigm talk reconsidered (Donmoyer, 2001) Qualitative educational research: The philosophical issues (Howe, 2001) Changing conceptions of culture and ethnographic methodology: Recent thematic shifts and their implications for research on teaching (Eisenhart) Narrative research on school practice (Gudsmundottir) Validity as an incitement to discourse: Qualitative research and the crisis of legitimation (Lather) Mixing social inquiry methodologies (Greene) Advances in assessments and their uses (Porter, Youngs, & Odden) Practitioner research (Zeichner & Noffke)

(Gage, 1963) set the pattern for subsequent Handbooks by creating a template for sections, which, in the first Handbook, included an introduction addressing an historical description of exemplary teaching methods (Broudy, 1963), the use of logic and scientific method in research on teaching (Brodbeck, 1963), and a third section on paradigms for research on teaching (Gage). The latter two clearly reflect the deductive and positivistic epistemology suffusing both the later chapters on methodology as well as the direction which the editor and authors hope that educational research would take. The chapters by Gage and Stern also strongly advocated adherence to rigorous scientific canons in educational inquiry as well as expressed disdain for both atheoretical (or even antitheoretical) dust-bowl empiricism, or "ill-considered collection of facts ... or mere factual data ... upon which the researcher has imposed little rationale" (Brodbeck, 1963, p. 102) on the one hand, and "complete movement away from facts," or research lacking any systematic empirical grounding, on the other. Perhaps reflecting the defensiveness of educational researchers attempting to establish themselves and their work as scientifically legitimate, Gage, in the first

Handbook, established the right of educational researchers to the entire range of empirical research, from basic to applied to implementation of programs (Brodbeck, 1963, p. 98). Gage's "introduction" has been followed in subsequent editions by initial sections on foundational disciplines, new ideas and perspectives, the impact of research on teaching, new – and new perspectives on – philosophical approaches to teaching, and theoretical developments.

The first edition then included a section on methodology for research, in which the "noncognitive variables," or "mental processes of a less rational character" (Stern, 1963, p. 407) to be measured included such things as historical antecedents of performance, attitudes and values, volition, anxiety or other "sources of chronic impairment of performance." The methodology section was followed by sections on teachers and teaching, instruction at various levels from pre-school to the university, and in the various content areas. Of interest is that no chapter is devoted to students and student learning. In various forms, these sections have been replicated and added to in subsequent editions.

Second Edition

The second edition (Travers, 1973) reflects the first edition's disdain for nonexperimental research. The chapters addressing qualitative research and observation are framed in terms of the cautions, issues, and pitfalls that await their practitioners. Notwithstanding, the second Handbook began to foreshadow the exploration of topics which required the advent of non-experimental designs. As mentioned earlier, research on how teachers taught, teaching in the content areas, and assessment of teacher effectiveness, measured in multiple deductive ways, had dominated educational research prior to the mid-1960s. However, the War on Poverty in the 1960s and early 1970s moved the focus to students, spotlighting the fact that the largest number of students doing poorly in school were those who were poor, minorities, and/or culturally and linguistically different. These groups also were those with the highest dropout rates. Further, correlational research identified gender differences in achievement; the educational experiences of girls differed from that of boys, and girls reaped fewer benefits from their education than boys did. Further, the size, structure, curricular offerings and patterns of extra-curricular activities in and out of schools affected the individual experiences of children in schools and classrooms (e.g., Adler & Adler, 1991; Coleman, 1961; Eder, 1985; Eckerd, 1988; Lee & Bryk, 1988); these and other peer group influences seemed to affect how well students did in school. The problem with these research findings was that one either had to accept that the groups failing were, in fact, intellectually inferior to white students, males, and popular students, or that something not measured by correlational and experimental studies was causing their failure. Likely factors that did not involve "blaming the victims" own characteristics included teacher quality, teacher training, amount of time spent in instruction, school resources, interactions with and support by parents, interactions with peers, teachers and staff in the school, instructional programs, differences between the culture and language of the school and that of the child, and low expectations by teachers. Factors such as teacher quality, training, school resources could

be measured quantitatively, if defined appropriately. But investigating the impact of other factors required observation, case studies and even longitudinal research.

The move toward more critical epistemological approaches to research in education is hinted at in one chapter (Green, Bakan, McMillan, & Lezotte, 1973) of the Travers edition. In that chapter, the authors discuss the politicization of the research/ evaluation process, the purposes for which research is done, and the impact of relationships between researchers and those they research, especially with regard to the disproportionate power wielded by researchers. The issue of purpose involves whether or not evaluators can be neutral; the article argues that they cannot be. If investigators become action oriented scholars, the authors argue, they inevitably step across the line from basic or "pure" research to advocacy - a stance eschewed by serious scholars of the time when they were acting in their roles as researchers. The question of power and politics describes how, in many communities, the stance of research participants is beginning to change, such that while subjects of research once were passive objects and perhaps consumers of the researcher's actions, many groups, especially those who were socially and economically marginalized, were beginning to question whether or not they actually benefited from researcher activities. They also were demanding "a piece of the action" (Green et al., 1973, p. 623). In this way, the authors foreshadow critical theoretical and post-modern concerns with participant voice, researcher subjectivities, asymmetries of power, and collaborative research efforts. While to some extent these issues appeared in articles published by AERA's American Educational Research Journal and the Review of Educational Research in the 1990s and early 2000s, they do not, however, really emerge in the Handbooks until the fourth edition.

Unlike the first edition, the second edition did introduce the student learner to the arena of education with chapters on giftedness (Getzels & Dillon, 1973), the mentally retarded (Blatt & Garfunkel, 1973), and the emotionally disturbed learner (Hewett & Blake). It also peeked into topics other than the simple focus on teaching and intellectual differences alone. In one article on the "urban school (Green et al.)," the Travers edition addressed what the authors called a "national dilemma." That dilemma involved the low educational status of minority children in the United States and argued that poverty was a factor in learning, linking it as well to the civil disorders studied in the 1968 Kerner Commission on Civil Disorders. The Green et.al., chapter deplored the school failure of Black and Puerto Rican children in urban areas, Mexican American and American Indian children in the southwest and West, and poor white children in Appalachia. Citing a report on the Detroit Public Schools, the chapter states that "the public schools are becoming symbols of society's neglect and indifference rather than institutions that serve the needs of society by providing upward and economic mobility" (pp. 601-602). The Green, et.al. chapter attributes low achievement in the aforementioned groups in part to the fact that teachers don't want to teach in urban schools and that those who are assigned to such schools are less well-prepared than their suburban counterparts. The chapter also foreshadows Bourdieu's and Passeron's (1977) and others' later analyses of the cultural incongruity between the values of middle class school teachers and the equally middle class expectations of schools on one hand, and the cultural, linguistic, social and economic

capital with which non-mainstream/whitestream children enter schools on the other. Much attention is given to the alleged lack of student interest and consequent disorder in urban classrooms, and the possible correlations between student and poverty, malnutrition and other health issues. The chapter also questions whether the lack of control over their schools by minority communities affects the achievement of their students, stating that urban schools are too large for parents to have a meaningful voice in the education of their children, and that the resource allocations they received were too small for the magnitude of the problems faced. The preceding argument - that schools with students who were "more difficult to teach" needed more, not merely equal, resources than middle class schools - was echoed the War on Poverty's compensatory education plans, but neither they nor the hot debate on "cultures of poverty" (Valentine, 1968), cultural deprivation, or cultural incongruity showed up in the *Handbook*. The second *Handbook* also addresses technology in three chapters - one on the analysis and application of media (Levie & Dickie), one on gaming and simulation (Goodman) and one on educational technology and related research viewed as a political force (Travers) - but none of the subsequent Handbooks continued this discussion.

Third Edition

The third edition was published in 1985–1986, just after the Commission Report, "A Nation At Risk" (1983) and other associated reports appeared, deploring the failure of United States' schools to educate well all its children and to raise them out of poverty. Implying that the War on Poverty had failed because the schools were failing students, these reports called for a whole array of reforms stressing "excellence" in student achievement, teacher education and school performance. Most simply called for improving performance by increasing the standardized test scores considered to be satisfactory for students, increasing the number of courses students needed to graduate from high school, and the number of years and courses teachers had to take to achieve licensure. Such reforms required only that test scores and other numeric data be collected. But the specter of failure among non-white, middle class students did not disappear; simply raising standards in the absence of any interventions into the teaching process did little to improve the situation, and again created a call for different ways to examine why students - and teachers - were not performing as desired. This time, diversity and poverty were noticed. Further, AERA publications and activities demonstrated more willingness to entertain other ways to investigate educational matters. In 1977, AERA's journal of critical reviews, the Review of Educational Research, published Wilson's article on "ethnographic methods" and 1982, RER published "Reliability and Validity in Ethnographic Research," (LeCompte & Goetz), an article written by a sociologist and an anthropologist who translated Campbell and Stanley's (1963) canons for rigor in experimental research into canons appropriate for ethnographic research and case studies. In the same year, EEPA published LeCompte's and Goetz's description of ethnographic data collection in evaluation research. During the mid-1980s the organization began to sponsor a series of workshops at the annual meetings on "complementary methods;" presenters for the seminars discussed

examples of and gave descriptions of how to do, historical, philosophical, survey, experimental and ethnographic research.

In 1988, AERA published its first real foray into methodological diversity, *Complementary Methods for Educational Research*, an edited volume based on the success of those seminars and workshops (Jaeger, 1988a). Jaeger's volume gave examples of and showed how to do historical (Kaestle, 1988; Tyack, 1988), philosophical (Gardner, 1988; Scheffler, 1988; Scriven, 1988; Snook, 1988), ethnographic (Wolcott), case study (Brauner, 1988; Stake, 1988), survey (DeCasper, 1988; Jaeger), *and* experimental and quasi-experimental research (Willson, 1988), in that order, and in so doing, gave legitimacy to other forms of educational research. All of these forms of investigation were termed "disciplined inquiry" (Shulman, 1988). However, even though experimental research was placed last in the 1988 volume, defining other forms of research as "complementary" still clearly established the primacy of experimental research and positivistic, deductively oriented investigation.

The third edition clearly reflects the paradigmatic and epistemological shifts seeping into educational research from the social and natural sciences. Unlike the second edition which, with regard to learner differences, dealt only with the cognitive differences and did not mention race or ethnicity at all, the four chapters in this section address not only differences in intellect (Corno & R. Snow), giftedness and creativity (Torrance, 1986), and disability (MacMillan, Keogh, & Jones, 1986), but also language (Fillmore & Valadez, 1986). Teaching and teachers, and teaching in the content areas still emphasize transmitting of content area material, though two chapters - the first on this topic in the Handbooks also consider how teachers and students think. However, the third Handbook was still narrowly focused on classroom instruction, teaching and learning. Examination of the authors cited in the one chapter focused on culture, "The Cultures of Teaching" (Fieman-Nemser & Floden) demonstrates its dependence on research from the sociology of education, focusing as it does on group and class-room based cultures and dynamics, teacher socialization to careers and their professional development, teacher development and education, and the roles of various players and stakeholders in educational systems. However, the insinuation of this alternative disciplinary approach is not noted, and the term "cultures" of teaching denotes the lack of familiarity of the educational research community with work on cultures of teaching and learning generated in anthropology.

Sea Changes in Theory and Research Prior to the Fourth Edition

Before talking about the Fourth edition (Richardson, 2001) of the *Handbook*, it is necessary to discuss some of the transformations in educational foci and conceptual frameworks that led to the dramatic changes in tone and tenor from the third to the fourth edition. Erickson's emphasis in the third edition on "interpretivism" and *verstehen*, an echo of Weberian mandates for "intersubjective understanding" was only an inkling of the shift from post-post-positivistic objectivism to

critical and post-modern perspectives that had begun to suffuse the social sciences more generally, and research on education in the social sciences - but not in the field of education. Frederick Erickson and a few other researchers, mostly anthropologists or members of the Council on Anthropology and Education, used the terms qualitative, interpretive, emic, constructivist, and phenomenological almost interchangeably to denote the attempt by researchers to hold their own conceptual frameworks in check until their informants could tell their "own story" and the researchers could "get it right." This enabled researchers to determine how their subjects viewed the world as well as the rules they created and used to guide their own behavior. Inevitably, these researchers were confronted with the question, "Whose story is being told?" as they investigated the life-worlds of people with underprivileged and often silenced perspectives. This question highlighted the asymmetries of power between researcher and researchers; it also required researchers to recognize the existence of different ways of construing and interpreting reality, nested contexts (Lubeck, 1988) and multiple levels of meaning within a given setting; the relevance of holding both experience near (emic) and experience distant (etic) perspectives (Geertz, 1973; Lubeck, 1988; Rosaldo, 1989) relating to informant/subjects, and the diversity involved in presenting results.

At the same time, prominent educational psychologists like Stake and others were discovering that the experimental and deductive approaches they used in evaluation research did not answer questions educators asked about *why* programs did not work or what really was going on in schools and classrooms. Ignoring decades of prior field studies, ethnographies, case studies, and naturalistic basic and evaluation research done by sociologists, anthropologists, clinical and ecological psychologists as well as the years of process, observational and ethnographic research funded by the federal government's "War on Poverty," Stake (1978) immodestly declared the discovery of a "breakthrough" design that he called "case study" research in the *Educational Researcher*. Colonizing other disciplinary territory and claiming it for ones' own is not new, but it is particularly common in education, dominated as it has been by psychology, and thus uninformed by developments in all the other social sciences and the humanities.

At the same time that educational researchers were being confronted by both the constraints of behaviorism and deductive approaches to their investigations, and the difficulty of making sense of informant/subjects' worlds when they used the norms and definitions of their own, they also were confronted by the probing questions of new entrants into the research community who challenged traditional theoretical frameworks that had legitimized the status quo – women, people of color, the poor, individuals who were not in the heteronormative mainstream, and those whose native tongue was other than English or the dominant language. Historically dominated by white, male, middle-to-upper class, European and North American scholars whose interests, research canons, and expectations reflected the experience and privileges accorded to such individuals, the Academy had tended to study questions that addressed their own experiences and biases and legitimated the pervasive and benevolent ideological myths about the egalitarian and democratizing purposes of the United States educational system. These myths, however, did not square with the experiences of the new, non-mainstream researchers. Given their different perspectives, these investigators focused on the increasing, and real for them, economic, racial, linguistic, language and gender inequities in the United States' society and how the schools reinforced, rather than ameliorated, them (LeCompte, 1997, p. 251). The failure of schools to uphold the American "Dream" became a topic for investigation; it was tested quantitatively by researchers (Blau & Duncan, 1967; Bowles & Gintis, 1976; Carnov, 1972; Coleman, 1966; Jencks, 1972; Karabel & Halsey, 1978; Sewell et.al., 1969) whose work definitively demonstrated the inaccuracy of hitherto well-accepted arguments that merit and motivation equated with and explained academic success (Young, 1958). How and why this happens was explored qualitatively by researchers investigating high rates of failure among ethnic and linguistic minority students (Delgado-Gaitan, 1988; Deyhle, 1986, 1989; Eckerd, 1988; Fine & Zane, 1989; Fordham & Ogbu, 1986; Gibson, 1988; Gonzalez, 2002; Herr, 1991; Holland & Eisenhart, 1990; Ladson-Billings, 1997; Macleod, 1987; Swisher & Deyhle, 1992; Tierney, 1992; Valdes, 1996, 2001; Weis & Fine, 1993; Willis, 1977) as well as how schools short-changed girls, and how teachers' interactions with non-mainstream students actually led to the construction of school failure (McDermott, 1977; McLaren, 1980, 1989; Rist, 1971; Rosenfield, 1971). Other authors, both popular (Conroy, 1972; Kohl, 1968; Kozol, 1967, 1992, 2005) and scientific (Anyon, 1980; Apple & Weis, 1983; Deyhle, 1986, 1989; Deyhle & LeCompte, 1994; Hess, 1991; Oakes, 1985; Page, 1989; Philips, 1983; Sarason, 1971, 1990; Schofield, 1982; Wax et al., 1964), clearly demonstrated that education in the United States was not a "fair game" played on a "level playing field." Further, school failure was not limited to crowded urban schools, as had been argued in the second Handbook; it existed even in schools that apparently were doing well. While the reforms of No Child Left Behind (2002) have been criticized heavily and correctly for penalizing diverse schools (Linn, 2003) and obscuring real gains made by non-mainstream children because of adherence to meat-axe statistical formulae, the requirement, beginning in the early 2000s, that achievement scores be disaggregated by ethnic, income, linguistic and disability subgroups, not just reported as school-wide aggregates, clearly demonstrated that while US schools might be "working" on average, they were most effective for white and privileged sectors of the population. Most other sectors were being "left behind."

Erickson's chapter in the third Handbook argued that new interpretive and semiotic research designs were needed to show how meanings guiding the world of nonmainstream players differed from those of the "old guard." New theories were needed to explain this shift in conceptual and ideological focus. However, the old guard fought diversification of the Academy and its epistemology and research foci, and expressed their concerns in battles over supremacy of paradigms and who controlled the canons of rigor and academic standards hitherto upheld by intellectual elites. In these discussions, the term "quality" was a proxy for the work of white males in elite institutions. The newcomers, however, would not be silenced, demanding that their interests and experiences, told in their own stories and their own language, be legitimated (LeCompte 2000, p. 251). Calling for a shift in focus from structural determinants of norms and expectations to the agency of individual actors in constructing their destinies, they also demanded that researchers examine their own role in and impact on the research setting and its constituent actors. This meant a shift from objective detachment to passionate involvement and self-reflection on the part of researchers (LeCompte 2000, p. 252). Further, the exclusive reliance on researcher definitions changed to a foregrounding of subject or participant meanings as guides for understanding and interpreting educational phenomena, and began to legitimate research that was collaborative, participatory, and action oriented.

In summary, even researchers operating inductively could no longer ignore that consciously or unconsciously, they were imposing their own disciplinary frameworks on the phenomena they studied in ways that facilitated a "top down" hegemony of positivistic approaches and perpetuated "Eurocentric ways of knowing" (Keller, 1983; Keller & Grontkowski, 1983; Nielsen, 1990). Research in cultural studies had made clear how contemporary research had "othered," "orientalized" (Said, 1978) and exoticized non-white middle class students, teachers and organizations. Interpretivism, phenomenology, critical and post-modern theory, symbolic interactionism and constructivism provided alternatives to the behaviorism and functionalism that had guided educational research, as well as mandated a shift from macro processes and systems to micro processes, individuals and small groups. This in turn led to an emphasis on how individuals think and on nuances of behavior, belief, and language. Methodologically, the new forms of research not only used more fine-grained and theoretically informed observations, as well as extensions of observation such as videotapes and participant-made journals and diaries, but also used the kinds of indepth interviews often termed "ethnographic interviews" (Schensul, Schensul, & LeCompte, 1999; Spradley, 1979). The shift from deterministic, logico-deductively imposed interviews, questionnaires, tests and observational protocols altered, in turn, the role of the researcher, since investigation became more intimate and longer in duration, and research questions began to explore more sensitive issues.

Fourth Edition

Aimed at creating order in the chaos of the field of education that had existed since the publication of the 1986 *Handbook*, the fourth Handbook (Richardson, 2001) is suffused with references to changing tides and shifting standards, as well as concerns about process, change, diversity, multiplicity, complexity, culture, dialogue, difference, morality and social justice, caring, process, development, and action. It specifically calls for expansion beyond conventional wisdom and approaches. More context and policy oriented, it asks for contestation of old and existing paradigms (Floden) and the introduction – and thereby the legitimation – of constructivist, socio-cultural and critical perspectives. It recognizes the multiplicity and ethnic diversity of the educational arena and the impact of that diversity on teachers, learners, and educational practice.

Because many of the old chapter headings used in previous handbooks wouldn't really work, new ones were needed. The old handbooks could not simply be updated because too much had changed. (Richardson, p. x). In the first place, separate handbooks on teaching of methods in some content areas - math, science, reading, and social studies - already had been created, superceding the summary chapters on those areas in the previous Handbooks. The fourth Handbook deliberately backgrounds the traditional subject by subject analysis of teaching content, though chapters on reading, writing, literature, mathematics, science, and vocational education remain. Interestingly, both social studies and the teaching of history are analyzed critically, reflecting shifts in those fields to a more multicultural and inclusive view of historical events, politics, and people. This Handbook adds chapters on health and physical education, the visual arts, moral development, and second language teaching - the first time that such a topic is legitimated. In keeping with the rhetoric of this Handbook, the chapter on science teaching announces a "revolution" in pedagogy and conceptualization. Similarly, the chapter on mathematics is suffused with constructionist approaches and a focus on nature of math and of learner beliefs, rather than on science and math facts. Both changes reflect constructivist manifestos by the National Council for the teaching of Mathematics (1989) and the National Association for Research And Science Teaching (1990) mandating radical changes in the way science and math are taught, given radical changes in how children were believed to learn those subjects.

The section on "The Learner" celebrates "the culturally rich school" (Dilworth & Brown, 2001); race, ethnicity and the linguistically different (Mercado), special education teaching (Gersten, Baker, Pugach with Scanlong & Chard), and feminist perspectives on gender (Biklen & Pollard). The section on social and cultural contexts and on the role of the teacher includes chapters on classroom cultures, written by cross-cultural psychologists (Gallegos, Cole, & the Laboratory of Comparative Human Cognition), and on school community connections, written by social scientists (Honig, Kahne, & McLaughlin, 2001), indicating that a far broader perspective on culture, community, teachers and learners is taken in this Handbook than in the previous ones.

With respect to methods, the Fourth Handbook announced that qualitative methods no longer are "new." In this way, it legitimated a wide range of studies, from case studies and field studies, descriptive narratives, life histories, community studies, historical and critical analyses, document analysis, ethnographies, clinical studies, and some kinds of surveys to biography and autobiography. Richardson indicated that chapters legitimating such approaches to investigation were no longer needed, given that two other handbooks of qualitative research in education already had been published (Denzin & Lincoln, 1994; LeCompte, Millroy, & Preissle, 1992). Further, a significant number of works had provided strong rationales not only for the legitimacy of research from "different paradigms" (e.g., Bogdan & Biklen, 1982; Guba & Lincoln, 1981; Lincoln & Guba, 1985), but also the use of "mixed methods" for combining qualitative and quantitative methods, notwithstanding some lingering discomfort over whether or not the specific epistemological paradigms were "competing," "complementary" (Jaeger, 1988), "alternative" or even "incompatible"

(Smith & Heshusius, 1986). These were denoted by a chapter in the fourth Handbook, and somewhat later, and by entire Handbook on mixed methods (Tashakkori, 2002) published by Sage, the most prolific solicitor and purveyor of methods books in the qualitative arena. In addition to Sage's series of "little books" on single issues in qualitative methods, a plethora of books on qualitative and ethnographic design were published in the 1990s and early 2000s, providing guidelines of all kinds for doing qualitative studies. Denzin and Lincoln updated their Handbook of qualitative methods in 2005 and in addition. AERA decided in the early 2000s to revise and re-issue its Complementary Methods volume. The result (Green, Camilli, Elmore, Skukauskaite, & Grace, 2006) was a tome of some 1,000 pages, covering what subsumes a mixture of methods, issues, strategies, and concepts, many of which were used somewhat idiosyncratically, and some of which actually overlapped. Qualitative research was embraced by the educational community with such enthusiasm that in some academic quarters, quantitative research was relegated to the background, caricatured as unable to address real issues concerning real people. Concomitantly, the glut of poorly done and under-theorized and under-analyzed studies of "real" people and events began to give some forms of qualitative research a bad name. In the late 1990s, the divide between policy-makers on one hand, and university based researchers on the other, was expressed in a strong preference in federal funding for quantitative studies - as described earlier. Reflecting this, the fourth Handbook resurrected quantitative methods, focusing on their utility in large scale data analysis in policy development and educational improvement (Crawford & Impara). It also legitimated mixing gualitative and quantitative methods (J. C. Greene), as well as research done by teacher/practitioners, not scholars (Zeichner & Noffke, 2001). The fourth Handbook also re-examined issues of purpose in educational research. It discussed various paradigmatic issues and proliferation of qualitative methodologies (Donmoyer, 2001). Epistemological differences were re-visited (Howe, 2001), and smaller chapters addressing specific issues in qualitative research, including validity (Lather), and changes and themes in ethnography when its anchor, the concept of culture, seemed to mean less and less in a world not so clearly linked to place (Eisenhart).

The Fourth Handbook provided a summing up of changes in the years between 1986 and 2001. The fourth Handbook acknowledges changes occurring outside schools and the realm of teaching and learning, while simultaneously retaining the "inside" focus of the previous Handbooks: Life in classrooms, teacher activities and their correlates, and problems in securing academic success for children. Educational research and practice still was searching for a silver bullet, a single program or incentive that would improve the achievement of all children, and a single lever that would provide a way in to galvanize improvement in recalcitrant and failing schools. Such a perspective may be a holdover from behavioristic notions of teaching and learning. However, much research outside of the confines of AERA and its focus on classroom instruction, individual teaching and learning indicates just how difficult achieving these goals will be, because in fact, the problems of education derive from conditions *outside* the schools, not inside. Herein lies the principal disconnect between the foci of the AERA Handbooks, and events in the political system beyond.

The question then becomes, What will the fifth edition of the Handbook of Research on Teaching look like? What kinds of research will it call for, and how will it address the challenge of doing more than indicate what is going on in classrooms, the minds of teachers and students, how to teach varied subjects, and what impedes student learning? It should be noted that the changes reflected in the Fourth Handbook reflected the previous political era in the United States - it played catch-up to transformations that occurred from 1970 to 1990. However, the 2000s differ. By the time the fourth Handbook was published, many of the last vestiges of the social reforms of the 1960s had been obliterated, and an era of fiscal and social conservatism prevailed, one in which expenditures on education and particularly on education for the disadvantaged were looked at with suspicion and outright hostility. Even the Clinton presidency was constrained toward conservatism by the predominance of backlash, fiscal individualism and an attenuation of public concern for the good of the "commons" or general welfare. Federal concerns and priorities harkened back to the First Handbook, with its emphasis on teaching, content area mastery, and imposed conceptual frameworks. Universities struggled to maintain a concern with diversity, given school enrollments that are increasingly non-white, non-English speaking, and poor, and a teaching force that no longer reflects the composition of the students being taught. Doing so went against the grain of state and federal policy-makers unconcerned with resolving such issues. Further, the international context of education in a world whose economies were increasingly interconnected by global corporate linkages, and whose communications technologies could link far-flung regions and individuals in all fields, including education, was acknowledged only in the sense that policy-makers hoped to keep the United States in a pre-eminent position of world power.

Why What Is Known About Teaching and Learning Will Not Be Implemented

The War on Poverty of the 1960s clearly demonstrated which kinds of children in the United States were doing poorly in school and where they lived. Nearly 50 years have past since then. Study after study, even those reflected in the chapters of the *Handbook*, demonstrate that schools in the United States do not do well with students who don't fit the white middle class profile of a "mainstream" student – yet all schools now enroll increasing numbers of chronically poor, immigrant, language minority, and ethnically different students. Those schools that do achieve high levels of success with minority students – often private schools – do so with the aid of vastly increased resources, extremely dedicated teachers, and often, by selecting only those students who are most motivated or able. Recognizing that children who are far behind their peers cannot catch up in a normal school year, the KIPP Academy (Knowledge Is Power Program) schools (http://www.kipphouston. org/kipp/Default_EN.asp) have lengthened both the school day and the school year. Others emulate private schools with uniforms, stringent behavior rules and extra help for students; however, they may be thematic schools not suited to all students. They also may select out those students who are more challenging to teach; private and charter schools can and do refuse to enroll students not likely to show success, including English Language Learners, students with disabilities, and those with emotional or behavioral problems. The bottom line is studies that identify at-risk children are no longer needed. Who they are is known. Further, sufficient research already has been done on how to teach most at-risk students to assure that they actually can succeed in school. What, then, stands in the way of superior teaching and learning?

Reform Without Validity

One of the principal problems facing United States' education in the early-2000s is that a complete mismatch exists between the diagnosis of educational problems and the remedies proposed. Reform initiatives aimed at improving student learning have not been directed at teaching - pedagogy and instruction. Further, what is known to be good teaching and effective instructional programs - that which is highlighted in the Handbooks of Research on Teaching - often either cannot be implemented, has been corrupted in the interest of teaching to the test, or has been replaced with commercially developed, scripted instruction that deprives teachers of any professional initiative and students of lessons linked to their interests or needs (Bracey, 2002; Nichols & Berliner, 2007). Rather than address how to improve teaching, educational reform initiatives have been built around a "philosophy of action" that assumes students fail not because they come to school with educational deficits. their teachers are overworked and underpaid, the schools themselves are crowded, under-resourced and in need of physical maintenance, and the public refuses to appropriately finance education, but because students and their teachers are lazy. If laziness is the problem, then, the solution is comfortingly simple: Identify the slackers and take quick punitive action against them. If only the solution really were that simple. Notwithstanding that decades of research already have identified effective methods for teaching most children up through the equivalent of a high school education, no publicly-driven educational reform initiatives since the 1980s have addressed improvement in instruction. Instead, they have focused on accountability systems that test students and teachers repeatedly to identify those failing to meet increasingly rigorous performance standards and levy stiff penalties for teachers and schools whose students fail to make adequate progress. Some educators have equated such strategies to repeatedly weighing a cow instead of feeding it, and then wondering why it doesn't grow. A further problem is that new high stakes testing mandates absorb local resources that otherwise would be devoted to improving instruction. In addition, as the level and number of classes required for student graduation have increased, the penalties for failing to meet those standards also have increased. The No Child Left Behind reforms require that schools that are repeatedly identified as failures because some subgroups fail to make "Adequate Yearly Progress" be reorganized, closed, and/or handed over to private for profit corporations or non-profit parent or community groups.

While raising expectations for student performance, none of the reforms have provided the additional teachers, teacher training, funding and instructional expertise to assure that students can meet those expectations. Raising graduation standards to match those required for a student to enter a standard 4 year college - a strategy used in most states to improve performance in high school - without attending to why students do not and cannot master the content in those classes is not an instructional strategy, which is what most educators call for. While many innovations in instruction and teaching strategies have been developed by academic researchers and professional associations in the content areas, they have not been a fixture in federally imposed reforms. Implementing them has been left to individual schools and districts - with mixed results. Particularly in math, public reaction often has been hostile; in social studies and reading, the professional community itself has been divided in its opinions about the new ways of conceptualizing and conveying content. Older approaches, including inquiry based learning and project based and experiential education, are difficult to implement with large classes. Because they are predicated on the assumption of a middle class linguistic repertoire and background experiences (see e.g., Delpit, 1988), these approaches often do not work well with low-income students, culturally different students and those who are acquiring English language fluency. They also require confident teachers who know their subject matter well and aren't afraid to exercise less control over student activities.

Public Penury and Punishment

Further, the new reforms take funds away from instruction. In an astonishing reverse-Robin Hood approach, funds now are diverted away from schools most in need and awarded to those already more successful. The No Child Left Behind initiative has reversed 40 years of compensatory education by financially punishing schools and teachers if their students do not perform to an artificially set standard of mastery, rather than rewarding them for doing better. While the idea of expecting uniform levels of mastery for all children is salutary, failing to acknowledge and accommodate to the diversity of preparation with which students arrive at the school door creates a system where schools serving poor students usually only experience punishment, regardless of how hard they try. The federal mandates for additional testing programs came with no additional funds. To comply with those mandates, states and districts have hired testing companies to develop standardized tests, at considerable cost. Not only is money for testing subtracted from money for teachers and instructional materials, the tests themselves often are not fully matched to content taught in schools, which guarantees that students will do less well than if they were taught what was tested. At the school level, schools are required to re-direct instructional funds to tutoring for students who do poorly or for transporting them to other schools, should their parents so desire. The overall effect on teaching has been profound. It could be equated with starving a cow while wondering why it doesn't gain weight. The rigid formulae for determining if schools are failing destroy teacher moral in schools whose students are improving, but

not enough to satisfy the mandates. Highly diverse schools are particularly vulnerable because even if only one NCLB subgroup fails to make "adequate yearly progress," even if by only one point, the schools still are declared failing, regardless of the achievement of all other subgroups. The question is, why has such a situation been allowed to occur?

Looking beyond the classroom and schoolyard is informative. First and foremost, inequality is built into the decentralized way the United States finances its public schools. Even with state equalization formulae for foundational funding, inequalities in the capacity of local communities to raise funds for schools abound, such that schools serving affluent communities systematically provide more money for their schools. These practices guarantee unequal distribution of funds and fewer resources for poor or needy children. Attempts to change the way schools are funded have failed repeatedly; further, the federal contribution to schools, never very large to begin with, has shrunk.

Second, United States' taxpayers have been reluctant to spend what is needed for adequate instruction on public schooling. As Kozol (1992, 2005) has argued, when poor and at-risk children attend schools with leaky roofs, outdated textbooks, inexperienced teachers and very large class sizes, they cannot be expected to compete with those who are more privileged. In fact, these students cannot imagine what such competition might entail, or what a different life might look like.

Third, educational policy feeds the social class divide between rich and poor children by increasingly shifting the costs of education from public coffers to individual parents and children in the form of fees for books, activities, supplies, extra-curricular activities, field trips, and even athletic uniforms. Fees for athletic clothing and gear can cost in excess of \$100 per sport per child, which eliminates many children from participation. Many school districts do not pay for the textbooks used in advanced classes like calculus or Honors programs. Textbook costs alone preclude many bright children from participating in such classes, even though they are required for acceptance into top colleges. Fourth, a concerted political effort to discredit public education and discourage its funding has born fruit, convincing many taxpayers and parents to decide that since the educational cow is dving anyway, feeding it at all is a waste of time (Berliner & Biddle, 1997; Bracey, 2006; Nichols & Berliner, 2007). Thus, the problems identified in the Handbooks are not likely to be solved by the solutions they identify. "Successful" schools are, almost without exception, those without large minority and poor populations, and often without diversity. Unfortunately, diversity is the hallmark of American society and increasingly, of all of its schools. Unfortunately also, racism, elitism, and linguistic parochialism are pervasive in the United States. These factors tend to legitimize, if they do not simply render invisible, the fact that more difficult to teach children simply aren't taught, and that current reforms render schooling so mechanical and boring that even the most able and affluent children resist learning. In fact, it could be argued that current public schools have been forced into creating a context that is totally antithetical to the social, emotional, intellectual and physical needs of young children and adolescents for human communication and interaction, psycho-social support, intellectual challenge, physical exercise, and excitement.

Inappropriate Reward Systems for Teachers

Not mentioned in the *Handbooks* is the impact of reform initiatives on the teachers (see Dworkin, 1987; LeCompte & Dworkin, 1991, etc.). Funding cuts make teachers' jobs more difficult, and many new programs exacerbate their work load. Including disabled children in the classroom is ideologically attractive, but it increases the load of the classroom teacher. Using sheltered English or ESL strategies is helpful to teachers whose students are learning English, but it's a different kind of teaching, with different measures of success. Many content area specialists prefer to teach their subject, not English. Many know nothing at all about *how* to teach English. Large classes – the consequence of funding cuts – make the individualization mandated for hard-to-teach students impossible. Testing mandates and scripted instruction de-professionalize teachers, turning them into drillmasters and automatons, rather than, as is usually the case, people who passionately care about children and teaching. The result is increasing teacher alienation and an accelerated rate of flight from the profession (Dworkin, 2007, p. 197).

New Directions for Research

The preceding gloomy perspective is not intended as an indictment of the material covered in the *Handbooks*. What they do, they do well. However, what they do ignores the larger political economic and social context of educational systems, and it is that national and international context that now dictates what happens to teachers and students. Thus, this chapter calls for a re-examination of teaching and learning in the context of public policy arenas in which schools and educational systems inevitably operate.

At the Classroom Level

At the school and classroom level, some new directions are promising. In an attempt to more finely tune the use of instructional innovations, so-called "design experiments" have been used, in which researchers work in natural classroom settings, but systematically manipulate classroom activities variable by variable to identify which ones create the most effective learning, and increase the sustained effects of an experiment. Mixed methods that look at both process/implementation and product/outcome data may produce interesting studies of programmatic and instructional innovation, especially if these are undertaken longitudinally and on a large scale.

Inducing and Sustaining Change

New directions for research on classroom teaching and learning that subsequent Handbooks could address include how, under what conditions, and when teachers can be induced to change their instructional strategies, as well as how to assure that innovations "stick." Explorations of how people think – and how different people think differently – could affect how instruction is handled with increasingly diverse

student enrollments. In addition, more research is needed on the impact of information technology, both inside and outside of the classroom, and on how experience with technology might affect how contemporary children receive, learn, and retain information. Such discussions currently are absent from the previous four *Handbooks*, a lacuna which is surprising, given that very few children now enter classrooms without some sort of electronic communication or entertainment device on their person.

Technology

Further, little notice is taken in the Handbooks of the digital divide, which even in the early twenty-first century makes obvious the absence of computers and other equipment in poor schools, and their profusion in the homes and classrooms of middle class and affluent children. No separate study is needed to identify this as a problem. However, separate and apart from the use of information technology in actual teaching is investigation of the impact of information technology and electronic communication and entertainment devices, virtual games and personal communication systems - on how students think, solve problems, make decisions, interact and communicate with other human beings, frame their worlds and imagine their futures. To a very large extent, educational research has not addressed these issues; watching any teenager abandon reading books in favor of writing texts or playing games at a console should be convincing evidence that these topics need examination in the context of schooling. The "thinking child" of the twentieth century is not the "wired in child" of the 1990s, and the latter is not the post-digital and wireless child of the twenty-first century. While children now read very few books voluntarily and write very little by hand and on paper, increasingly large numbers of children read a great deal online, and they write volumes with cell phones and other devices and on email and blogs. However, these forms of literacy depart widely from school-type literacies, and, it could be argued, corrupt such literacies. New Handbooks should publish work that investigates the impact and use of texting and its language, not only on how children write and communicate, but how they think and interact.

Rewarding Teachers

Another issue needing examination is compensation for teachers. Uniform pay scales flatten salary curves after a short time which creates disincentives to remaining in the profession. In the absence of merit pay, teachers have no way to be promoted except by moving out of the classroom and into administration. The intrinsic reward of watching children's knowledge grow is inhibited by scripted instruction and curricula constricted by testing programs. While policy makers advocate paying teachers in accordance with how much learning they demonstrate, such strategies are fraught with difficulty, not only because of the nature of the tests used to measure student achievement, but because this year's teachers work with the accumulated effects (or

lack thereof) of all other teachers a child has had. Some very current and currently incomplete research on value added forms of evaluation and assessment of teachers (Briggs, 2007; Harris, 2008; Harris & Sass, 2005; Wiley, 2006), as well as growth models for measuring student achievement (Betebenner, 2007) are promising alternatives to the aggregate standardized norm referenced and mastery based assessments currently being used to measure student achievement and teacher performance. However, none really have been implemented at the level of the individual teacher.

Further, the social structures and economics of the twenty-first century are out of touch with school systems still rooted in the early twentieth century (LeCompte & Dworkin, 1991). Not only has research on teaching not examined how the social expectations for schools, children and families, the conceptions of families and social networks, and the infrastructures available to students have changed since the buildings in which they teach were constructed, but research has yet to fully understand that since schools are social systems or cultures, only "systemic" change or change that affects all aspects of the system will be viable and long-lasting (Elmore & Associates, 1990; Sarason, 1992). But where does one find a wedge with which to enter and leverage such social systems? What levels or catalysts exist, given that teacher turnover can be as much as 50% per year and this year's charismatic teacher leader may be burned out and at another school next year?

Implementation or Sabotage?

The biggest current problem, however, is that what is known about teaching isn't being implemented; what works is being ignored, and the current reform initiatives are, at best, not making much difference in student achievement (Dorn, 2007; Dworkin, 1997, 2007; Glass, 2008; Nichols & Berliner, 2007). At worst, they are seriously endangering the public school system, the achievement of vast numbers of students, and the professional lives of innumerable teachers. It could be argued that destruction of the public school system was the intent of neoliberal educational reforms from the beginning. This seems especially true as policy directives increasingly shift the costs of education from the public to individual parents and students and privilege corporate control and privatization of educational services. Further, one of the newest reforms calls for giving up on the current school system altogether; the National Center on Education and the Economy, in its report of the New Commission on Skills of the American Work Force, "Tough Choices or Tough Times," calls for high stakes early exit examinations, creating an intellectual elite consisting of the 20% who score highest on the tenth grade exit examination, restricting access to college education to that elite 20%, sending those who pass at an undefined "adequate" level to newly vocationalized community colleges, and relegating those who do not pass the exit exam to a limbo of retaking examinations and a "certificate of attendance" instead of a diploma. The consequences of such policies seem directed at recreating a dual system of education, with high quality training for the affluent

whose children score well because of their social class advantages, vocational education for the middle class and under-motivated, and minimal education or no secondary education at all for all other youth, especially those whose families cannot afford to pay for educational advantages.

Whether or not states will implement the "tough choices" remains to be seen, though a number of states have created commissions to propose implementation plans and testing companies are campaigning eagerly for lucrative contracts to construct the new exit examinations. What seems to be needed is an increase in research on the impact of governmental directives on actual teaching practice and student learning, given current conditions. This would require a halt in educational reforms that have little to do with education. It would require a halt in the current practice of punishing students and teachers for failing in schools whose working conditions would break the hearts and destroy the minds of the most dedicated learners. It would require looking carefully at how instruction actually happens in schools, and what the actual experience of teachers and students is, rather than at what works under optimal conditions, or at what could work, if only the will and the proper conditions for innovation existed. Though the compensatory programs of the past were not as successful as desired, they never reached even the majority of children in need. Giving up and substituting high stakes tests and punishments for compensatory instructional programs clearly is even less effective. In fact, what seems to be needed is a serious assessment of what it would cost to create even minimally acceptable teaching and learning conditions in schools with so-called "hard to teach" children. It is clear that the decades of rhetoric in which politicians and public figures argued that student educational success could be achieved with "no cost reforms" (Demarrais & LeCompte, 1999) wasted an opportunity to create a clear eyed assessment of what the real costs of educating all children well are. We submit that abandoning the idea of high quality public education for all would be a civic tragedy and a socio-economic disaster. Privatization strategies and takeovers of public schools by for-profit corporations have consistently failed to teach at-risk students well and make the necessary profit. Other free-market options, including voluntary transfers, open enrollment, and voucher systems do not reach those most in need, since the transportation and informational infrastructure necessary to inform parents and move children is insufficient in most communities and sufficient numbers of places in public schools appropriate for transfer simply don't exist. Further, the vouchers provided are insufficient to pay for tuition at a private school, even if one were accessible and had room for new students from failing schools. Regardless of what happens to their neighborhood schools, the students most in need remain in place. Ladson-Billings (2005) equated the cost of teaching the "remaining children" with an "educational debt" and argued that the latter term should replace the term "achievement gap." The education debt was the amount of money not spent on poor minority children, in comparison with what was spent on privileged children, factored over decades, with interest. She argued that until the education debt had been paid, no meaningful discussion of the causes of differences in achievement between rich and poor children, and between white students and students of color, could be held.

Educational Abandonment and Educational Debt

When their schools are abandoned, the students, too, are abandoned. Ethnic and social class cleansing strategies, such as the wholesale abandonment of much of the New Orleans school system after Hurricane Katrina in 2005, and the turnover of the rest – mostly in more affluent and less damaged areas of the city – to the jurisdiction of a state-wide board of education and administration by private corporations, are not socially just. They contribute to the erosion of the social fabric of both country and community. Schools are institutions that contribute mightily to the common good. Consistent research on the contribution of pre-school education to society, for example, shows a sevenfold return on investments (Karoly & Bigelow, 2005; Klein & Knitzer, 2007). Similar research shows that it costs more to send young offenders to prison for a year than it does to send them to an Ivy League college. These figures, however, assume that those upon who educational funds are expended will, in fact, be taught well enough to graduate, make use of their education, and contribute to society in the form of taxes on their income, increases in civic participation, better parenting, and more humane social values. Broadening the scope of what is considered to be "research on teaching" will help to make clear to the United States' public just how high will be the toll if we fail to count all the costs of abandoning of the public systems within which children are taught.

Ignoring the International Perspective

Clearly, much of the preceding commentary applies principally to schools, teaching and learning in the United States. Because United States' ideas about teaching, learning, and assessment are widely disseminated globally, and often accompanied by substantial financial incentives for their implementation, it is important that an international Handbook look critically at their impact in the place of origin. However, though it is beyond the scope of this chapter to summarize the wealth of research done by scholars outside of the United States, doing so is imperative and should be encouraged for the subsequent *Handbooks* and the publications of gatekeepers like the American Educational Research Association. Scholars in Latin America, for example, have pioneered the use of Vygotskian ideas in teaching and learning for indigenous populations (see, e.g., Lima & Emihovich, 1995). Researchers in the United States would benefit from examining how these countries address issues of literacy and numeracy in their multilingual and multicultural societies. In addition, cognizance should be taken of the political and financial contexts of education and how well schools are resourced in comparison with other governmental priorities, as well as. Since it is the non-white, non- English-speaking populations whose success in school is most questioned in the United States, and for whom the least resources are available, it would seen appropriate for lessons to be learned from those countries where such populations do, in fact, attain success in education.

Biographical Note

Margaret D. LeCompte is professor of education and sociology at the University of Colorado-Boulder. She received her BA from Northwestern University and her MA and PhD from the University of Chicago, and served in the Peace Corps in Somalia from 1965–1967. An internationally known proponent of qualitative and ethnographic research and evaluation in education, her publications include the seven volume *The Ethnographers' Toolkit* (1999), with J.J. Schensul, *Giving Up On School,* with A.G. Dworkin, and *The Way Schools Work,* with K.B. DeMarrais, plus many other books and articles on research methods, school reform and school organization, and investigations of at-risk, ethnically diverse, gifted, and language minority students. Dr. LeCompte was president of the Council on Anthropology and Education of the American Anthropology Association in 1983 and Editor of the *Review of Educational Research* from 2003–2006. She is current president of the CU chapter of the American Association of University Professors, and vice president of the Colorado Conference of the AAUP.

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TEACHER RESEARCH AND TEACHER AS RESEARCHER

Cheryl J. Craig

Teacher Research

Conducted by university researchers and/or teachers themselves, teacher research is a form of inquiry approached from the teacher perspective. Such research works from the assumption that teachers "make up their own minds about how to change their practices in light of their informed practical deliberations" (Carr & Kemmis, 1986, p. 219). It adds to the knowledge base of teaching, despite ongoing controversy whether that knowledge base should be codified, who should contribute to it, and for what purposes it should be used (Cochran-Smith & Lytle, 1998; Donmoyer, 1996; Kleibard, 1993; Shulman, 2004; Wise, 1993). The strand of research includes teacher-oriented (1) action research (Altrichter, Posch, & Somekh, 1993; Stringer, 2007; Whitehead & McNiff, 2006), (2) case study research (Adler, 1996; Goldblatt & Smith, 2005; Shulman, 1996), and (3) reflective practice (Ladson-Billings, 1999; Pedro, 2005; Russell & Munby, 1994). Also, (4) narrative inquiry (Clandinin, Pushor, & Murray Orr, 2007; Connelly & Clandinin, 1999; Estola & Elbaz-Luwisch, 2003), and (5) practitioner inquiry (Day, Calderhead, & Denicolo. 1993; Dadds & Hart, 2001; Zeichner & Noffke, 2001) constitute veins of teacher research. The (6) self-study of teaching and teacher education practices (Feldman, Paugh, & Mills, 2004; Guilfoyle, Hamilton, Pinnegar, & Placier, 2004; Loughran, 2005) and (7) the scholarship of teaching and learning (Hatch et al., 2005; Hatch & Pointer Mace, 2007) are furthermore included. Additionally, (8) the use of practice as a site for research (Lampert & Ball, 1998; Wilson, 2001) forms a branch of the teacher research tree. Cutting across these related lines of inquiry are the associated literatures having to do with teacher collaboration (Achinstein, 2002; C. Clark et al., 1996; Craig & J. Huber, 2007), teacher conversation (C. M. Clark, 2001; Feldman, 1999; Hollingsworth, 1994; Rust, 1999), and teacher community (Cochran-Smith & Lytle, 1999; Olson & Craig, 2001; Wilson & Berne, 1999; Grossman, Wineberg, &Woolworth, 2001). Teacher networks (Lieberman, 2000; Wood & Lieberman, 2003) and teacher research networks (Ainscow, Booth, & Dyson, 2004; Atwah, Kemmis, & Weeks, 1998; Reason & Bradbury, 2001) such as the Collaborative Action Research Network (http://www.did.stu.mmu.ac.uk/carn) (which began in the

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U.K. but is currently international in its reach), and teacher research studies arising from the National Writing Project and its regional affiliates in the U.S. (http://www.nwp.org), for example, are also closely aligned with the teacher research and teachers as researchers theme.

Teacher as Researcher

While Lawrence Stenhouse is credited with pioneering the concept of teacher as researcher in Europe, Joseph Schwab is recognized for championing deliberative inquiry in North America (Hollingsworth & Sockett, 1994). As Director of the Humanities Project in the U.K. (1967–1972), Stenhouse merged curriculum development and professional development into a single activity that engaged teachers as active agents. Through this approach, he [and John Elliott (UK) and Stephen Kemmis (Australia) after him] eschewed false separations between creating a curriculum and the teachers who created it. Stenhouse (1980) involved teachers in hypothesis generation, Elliott (1987) gave the research genre a hermeneutic turn, and Carr and Kemmis (1983) took a critical-emancipatory approach. Previously, in North America, Kurt Lewin (1946) had introduced the notion of action research in social psychology settings and later, Stephen Corey (1953) and others at Teachers College, New York, involved teachers in active curriculum development. But it was the British curriculum reform movement that birthed the concept of teacher as researcher (Hollingsworth, 1995).

Meanwhile, Schwab's focus on practical inquiry shaped the fields of curriculum and teaching in North America (Craig & Ross, 2008). Schwab's "Practical" disturbed a curriculum establishment that had sequestered itself from practicing teachers through the privileging of theory. Schwab warned the curriculum field would be unable to continue in its present state, given the "flights" in which professors were engaged (Schwab, 1969). Schwab, in Eisner's (2006) words, "changed the field forever" (Personal communication). As Eisner (2002) explained,

With the advent of Schwab's (1969)... essay on the practical, the ground shifted. Those interested in curriculum matters and working with teachers began to recognize that the conditions teachers addressed were each distinctive. As a result, abstract theory would be of limited value. Each child needed to be known individually...each situation...was unique. It was a grasp of these distinctive features that the teacher needed...to make good decisions in the classroom. (p. 381)

Thus, Schwab is arguably "the first educational theorist to call close attention to the lived experience of children and teachers in classrooms" (Elbaz-Luwisch, 2006, p. 359).

Schwab additionally maintained that no curriculum deliberation would be "adequate" without teacher participation. This assertion helped pave the way for teachers actively engaging in inquiries. It also laid the groundwork for the study of teachers' knowledge, which some term teacher beliefs and attitudes (Calderhead, 1996; Richardson, 1996).

Teacher Knowledge

Underpinning teacher research is a view of knowledge that bridges the gap between the human person as a knower and what is known (Dewey & Bentley, 1949; Schön, 1983). Existing reviews of teacher knowledge examine what and how teachers come to know from preservice and in-service points of view (Borko & Putnam, 1996; Calderhead, 1996; Carter & Doyle, 1996; Fenstermacher, 1994; Grimmett & MacKinnon, 1992; Grossman, 1995; Munby, Russell, & Martin, 2001; Putnam & Borko, 2000; Richardson, 1996; Wideen, Mayer-Smith, & Moon, 1998). Fenstermacher (1994), for example, addressed the nature of teacher knowledge. He argued that teacher inquiries (broadly associated with Clandinin and Connelly, Schön, and Cochran-Smith and Lytle) are concerned with practical knowledge and seek to create "a new epistemology of practice" (Schön, 1995).

As for research following the Shulman (1986) line (the scholarship of teaching/ the use of practice as a site for research), it straddles the boundary between practical and formal teacher knowledge. To Fenstermacher, it answers the question, "What knowledge is essential for teaching?" whereas other inquiries take up yet another query, "What do teachers know?" in their own terms.

Concerning the question, "Who produces knowledge about teaching?", Cochran-Smith and Lytle (1999) and Clandinin and Connelly (1995), among others (Austin & Senese, 2004; Duckworth & The Experienced Teachers Group, 1997; Lyons & LaBoskey, 2002; Nieto, 2005), support teachers' contributing to the knowledge base. Also, they favor the terms, practitioner inquiry or teacher inquiry, rather than teacher research, which originally implied that teachers would live researcher plot lines in addition to their instructional roles (Clandinin & Connelly, 1992; Cochran-Smith & Lytle, 2004).

Nevertheless, calls have been made for teacher inquiries to conform to the conventions of scientific research (Huberman, 1996; Phillips, 1988). Others rail at such expectations, claiming the wrong questions are being posed and/or the wrong interests championed (Clandinin & Connelly, 1996; Cochran-Smith & Lytle, 1993; Munby & Russell, 1995). Through repeated resistance, the post-modern turn has found conventional epistemology to be lacking. What is not clear is whether the existing criterion for knowledge claims will expand or whether the post-modern demand for multiple criteria will prevail (Fenstermacher, personal communication, 1996, in Munby et al., 2001, p. 879).

The Contexts of Teaching

To Clandinin and Connelly (1996), Fenstermacher's epistemological questions suffer from a critical omission: how teachers' knowledge is shaped in, and by, context. To capture the contexts of teaching, Clandinin and Connelly (1995) introduced the metaphor of a "professional knowledge landscape." Building on Schwab's belief that schools are practical places, Clandinin and Connelly conceptualized teachers' work as being situated in in-classroom places and out-of-classroom places. Thus, teachers live in two different professional worlds: one, relational and inside the classroom; the
other, abstract – where teachers meet all the expectations they are to enact. In-between these two professional places, Clandinin and Connelly envision "the conduit," a metaphorical pipeline connecting theory and practice. As Clandinin and Connelly (1995) explain, "nothing comes through the conduit [to teachers] as merely theoretical knowledge to be known and understood: it always comes as implied prescription for teachers' actions" (p. 14). Hence, while teachers experience a measure of moral autonomy in their classrooms, they are treated as "agents of the state, paid to do its bidding" outside of it (Lent & Pipkin, 2003, p. x).

Where research is concerned, these are two different epistemological positions (Boyer, 1990; Lyons & LaBoskey, 2002; Schön, 1991; Soltis, 1994).

Others' Questions; Teachers' Questions

This difference in perspective-taking explains why policymakers operate from the assumption that knowledge can be generalized across teachers, school reform can be standardized across schools, and that the same educational means result in the same educational ends. It also explains why educators in their real-world classrooms know otherwise (Davis, 2003). Teachers in their in-classroom places "understand that their knowledge is personal and contingent, that school contexts are unique, and that reform efforts unfold differently within and across school sites" (Craig, 2007, p. 160).

Given this backdrop, it is little wonder that those involved in teacher research raise different questions from the queries that detached theorists and policymakers favor. While the latter privilege large-scale investigations that address efficiency questions important to those outside of classrooms, teachers and those studying teaching pose questions embedded in practice and immediate in nature. Elbaz-Luwisch (2006) explains that "...teacher knowledge is deeply personal... [thus, teacher] research... has no choice but to go in close" (p. 376). Duckworth (2005) furthermore affirms that when teachers assume an inquiry stance as researchers " – engaging learners' minds and hearing what they have to say – the students are not the only ones who learn..." (p. 273). Hence, the questions teacher research pursues cover a broad spectrum:

- How is this [new activity] going to fit into my curriculum? (Wineburg & Grossman, 1998)
- How do teachers/students experience culture in curriculum? (Chan, 2006)
- How do I instruct Arabs and Israelis in the same teacher education class? (Elbaz-Luwisch, 2005)
- How are particular teachers helping students make sense of the U.S. events of September 11, 2001? (Soto, 2005)
- What is the experience of school reform in mathematics, science, and technology in Room 34 at Bay Street School? (Ross, 2004)
- How did one Physics teacher change his algebraic thinking? (Nicol, 1997)
- Why did a particular approach to professional development fail? (J. Huber, 1995)
- What visions of teaching do teachers hold and express in their practices? (Hammerness, 2006)

- Why do teachers teach? (Nieto, 2005)
- What are the enduring outcomes of one teacher's teaching? (Barone, 2001)
- How can I, as a white teacher, teach native students? (Hermes, 2005)
- How does my gender as a male influence my interactions with kindergarten students? (Goldblatt & Smith, 2005)
- How do I account for the underachievement of African American males in my AP English class? (Hatch et al., 2005)
- What is the role of teaching if knowledge is constructed by each individual? (Duckworth, 1987)
- What knowledge-in-use is available in particular teachers' classrooms? (Noffke, Mosher, & Maricle, 1994)
- What do my elementary students think as they read? (Dybdayl, 1994)
- How do teachers learn from one another while collaboratively thinking about their work? (Duckworth & The Experienced Teachers Group, 1997)
- Can we create spaces in our schools where reflection becomes a priority? (Conle, 1997)
- What is my role as an educator when school politics divide a community? (Goldblatt & Smith, 2005)
- Can we connect schools and universities, building community that provides for growth and change, and sharing responsibility for and involvement in practice and research? (Lieberman, 1992)

Teacher Research and Public Policy

The question inevitably arises as to whether teacher research has anything to offer policymakers. Hatch, Eiler White, and Faugenbaum (2005) and Rust and Myer (2006) would argue ves. So would Elbaz-Luwisch (2006). To Elbaz-Luwisch's way of thinking, research conducted by Conle (1997) and Craig (2006), for example, opens up "wider issues" (p. 371) concerning the nature of school decision-making, the professional development of teachers, and teaching in a high stakes testing environment. Clandinin et al.'s (2006) book also addresses policy by following how character education policy plays out in context and by imagining how different turning points in students' lives contribute to the dropout rate. Meanwhile, the research of Connelly, Phillion, and He (2003) centers on how multicultural education policy has been lived for over two decades in one Canadian inner city school. A further example is the ten authors and two editors of Silent no more: Voices of courage in American schools (Lent & Pipkin, 2003) who explore the limits of teachers' intellectual freedom mostly within literacy projects coming to terms with standardized testing demands. Among the chapters is an essay authored by Yatvin (2003), the member of the National Reading Panel who filed a Minority Report. Given that the \$6 billion dollar Reading First Grant Program administered by the U.S. Department of Education has recently been reviewed by the Inspector General's Office (2006) and found not to be in compliance with the grant application process, Yatvin's practitioner research uncovers deeply concerning issues in the literacy arena prior to the grant program's call for proposals. Taken together, Yatvin's study, the Minority Report, and the Inspector General's Report triangulate troubling phenomena.

As can be seen, teacher research/teacher as researcher findings shed important light on the wider education landscape from the vantage point of teachers. These different sets of questions lead to different sorts of answers. It is therefore prudent to follow Cochran-Smith's (2006) maxim and "sort out what kind of questions [are] being asked [and by whom], how research is being used, and to what larger professional and political agendas these are attached" (p. 122).

Biographical Note

Cheryl J. Craig, **PhD**, is a Professor in the Department of Curriculum and Instruction, College of Education, University of Houston, where she coordinates the Teaching and Teacher Education program and is Head of Elementary Education. Craig is the Co-Editor of the Association of Teacher Educators' Yearbook and is a regular contributor to such journals as *Teaching and Teacher Education, Teachers College Record*, and *American Educational Research Journal*. Craig has been the recipient of her College's research, teaching, and collaboration awards and is a Past-President of the American Association of Teaching and Curriculum.

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THE DISSEMINATION OF KNOWLEDGE ABOUT RESEARCH ON TEACHERS, TO THE TEACHERS

Lawrence J. Saha

Introduction

The purpose of this chapter is to examine the extent to which research knowledge about teachers, and for teachers, is actually disseminated in a way that enhances the teaching profession, the teachers themselves and the practice of teaching. Teachers occupy a position of direct contact with the students that not only they, but the entire educational system serves. They are at the bottom of a Y-chain of professionals that includes academic researchers on the one side of the Y, and educational administrators on the other. The former have no authority over teachers, but engage in research activity that can help them more effectively discharge their professional duties and use their professional expertise. The latter are in a chain of authority which defines and regulates their roles in the classroom. Thus on the one hand, school teachers are the object of much potentially useful academic research, but on the other they are increasingly accountable to administrators who have financial, organizational and community responsibilities.

In the best of all possible worlds, the dissemination of "useful" research knowledge to teachers goes through the administrators, and is supported by them. However, it can happen that the research is not deemed useful, or is simply not transmitted. Finally, it occasionally happens that the teachers themselves are researchers and create their own useful knowledge which enhances the performance of their classroom roles and responsibilities.

In the following chapter, I will examine our current state of knowledge about the links between research knowledge and the classroom teacher. I will focus on the production of academic research knowledge and its accessibility to the teacher. I will also examine what we know about education administrators and how they serve as conduits of that knowledge to the teacher. Finally I will focus on the teachers themselves as producers of research knowledge.

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Research on Teachers and Teaching – Usefulness and Accessibility

No one can deny the amount of funding, production of, and publication of educational research which focuses on teachers. But what is more important, there have been long-standing debates both within and outside of academic and research circles which have questioned the usefulness of this research. As Biddle and Saha (2002/2005) have documented, there has been a history of criticisms of educational research generally, especially by politicians and some academics (Finn, 1988; Hemsley-Brown & Sharp, 2003; Sroufe, 1997).

The basic argument has been that educational research has produced little useful knowledge for the improvement of educational outcomes, and that as a result considerable research funding has been wasted. However, as a result of their interviews with school principals in both the United States and Australia, Biddle and Saha (2002/2005) found that the findings from educational research do reach school principals, and many principals do take this research into account in their day-to-day decisions in running their schools. Furthermore they found that many principals pass on their own exposure to research knowledge to their teachers. In other words, there is evidence that educational research knowledge is useful, and does make a difference, but not in a uniform, or always direct manner. Some principals play a direct role, while others play a more indirect role.

But there were other aspects in the findings of Biddle and Saha (2002/2005) that are relevant for our concern here. They found that some principals take a more active role in both generating and discovering research by establishing committees in their own schools to conduct research, by speaking about research to other principals, by visiting schools which had implemented research-based policies, and by finding out about it at conferences (Biddle & Saha, 2006). However, it seems that these roles of the principal are enhanced when they have teachers in their schools who are more highly trained and who can assist in the generation of research knowledge (Saha, Biddle, & Anderson, 1995). What seems to be ideal is when schools develop a research culture, where research knowledge is generated and used, often to solve very specific problems.

Principals are key persons in the innovativeness and effectiveness of schools (Hallinger, 2003). Furthermore, the innovative principal is one who is more collaborative and consultative, and is also enthusiastic about innovation (Saha & Biddle, 2006). Underlying this more successful approach to innovative leadership is an appreciation of research and its importance in school educational policy. In their study of school principals, Biddle and Saha found that 70% of both American and Australian school principals considered research knowledge to be usually of value or invaluable, and less than 10% thought research knowledge was of little or no value. Furthermore, 56% of Australians and 63% of Americans considered themselves to be regular users of research knowledge (Biddle & Saha, 2002/2005).

Thus it is clear that academic research knowledge does reach the school level and at least to the level of the principal, and is appreciated and used. But does research knowledge reach the average teacher in any way other than through the decisions of the principal? Furthermore does this research knowledge contribute to more effective schools? Clearly,

this is a question which focuses on the relationship between school principals and, to a large extent, to the relationships between the school principals and their teachers. In many ways, this relationship depends on the style of leadership exercised by principals.

Education Research Knowledge, School Principals and Teachers

All too often the main criterion of the successful school principal is student achievement. Schools where students perform well are assumed to be led by excellent principals. However it is the teachers in the classroom, and the ways they carry out their own teaching roles that largely determine student achievement. In the end, it is the relationship between the school principal and the teachers, and the type of leadership that the school principal provides, which will determine how well the teachers and the students perform. Already in the 1990s, movements were occurring in the United States and elsewhere to introduce greater accountability from principals and teachers for student performance (Daresh, 1998). Indeed, the current demands of the *No Child Left Behind Act* (United States, 2002) in the United States requires that schools be staffed with high quality teachers, and of course this will depend largely on the principal.

Most would agree that the principal's responsibilities of running a school include financial and maintenance duties, and most would agree that matters relating to the curriculum, staff supervision, staff development, and the maintenance of an academic-oriented school climate also fall within these responsibilities. In a study of 325 middle level principals and teachers, O'Donnell and White (2005) found a number of factors which teachers perceived as influencing student achievement in mathematics and reading scores, the most important being the promotion of a learning environment. But what is more unusual about their findings are the implications for the principal. In order to foster a learning school climate, O'Donnell and White present Hallinger's (1987) list of the principal's functions, one of which is to promote the professional development of teachers. This function includes attending, developing and leading instruction-based activities for teachers. What this implies is that the principal, himself or herself, must be up-to-date on relevant research knowledge, and in the process of maintaining a learning school climate, must pass on that knowledge to teachers. Unfortunately, a recent study found that principals often are not adequately prepared for this task, which implicitly means that they might not have adequate familiarity with the relevant research knowledge about educational structures and processes (Petzko et al., 2002).

Another somewhat different example of the principal's function in transmitting research knowledge to the teachers is found in the study by Dworkin, Saha, and Hill (2003) of 2961 urban public school teachers in Texas. In focusing on teacher burnout and the leadership style of the school principal, Dworkin and his colleagues found that teacher burnout was lowest in schools where the teachers perceived the school climate as more "democratic". Being "democratic" meant that the teachers participated more in the decision-making processes of the school, and had access to knowledge related to the school's full operation. In this "democratic" environment, the teachers also enjoyed the support of the principal in their day-to-day classroom

experiences. Implicit in this finding is that the inclusion of teachers into the operation of the school is beneficial for their emotional strength. This notion of a "democratic school" also implies the sharing of knowledge, and this implies not only knowledge about the school condition, but also about relevant research knowledge.

Teachers are not adverse to educational research knowledge, or to consulting and using it in their classroom teaching strategies. Everton, Galton, and Pell (2000) found, in their study of United Kingdom teachers, that 96% said they had considered educational research knowledge at some point in their careers. Qualifications and teaching experience seemed to be important factors in determining which teachers had considered educational research findings; inexperienced teachers were less likely to have consulted research findings, which suggests that length of career experience may be an important factor regarding this practice. But what is interesting is that, of those who said they had considered research findings, roughly 78% were able to name at least one specific research project or research finding. The 22% who could not do this were teachers without postgraduate qualifications or who had less than 10 years of teaching experience. These results are partly consistent with Biddle and Saha's (2002/2005) findings regarding school principals, in which a large number, about 98%, could name at least one research knowledge tradition. However, in the case of school principals, at least for the Australians, it was those principals who were younger and had recently completed higher degrees who were the most knowledgeable about research results. This suggests that the conditions under which school principals and school teachers remember, or consult the findings of educational research, might be different in some circumstances. In either case, however, it seems clear that in one way or another, educational research does reach practicing educators, including teachers.

Sources of Research Knowledge

Given that education research is considered by teachers, the next question is how do teachers learn about it? The most obvious response to this question is through teacher magazines and other publications which relay education research in a way that practicing educators can understand. There is a wide range of publications in most countries which are oriented to teachers. One can think of *Education Digest*, *Phi Delta Kappan*, *Educational Leadership* and *Principal* in the United States, *The Professional Educator* and *Teacher* in Australia, *New Zealand Science Teachers Magazine* in New Zealand, *Teachers* in England and *Pedagogiska Magasinet* in Sweden, to name just a few. However, as Everton and his colleagues found, magazines and journals are only one source that teachers have for exposure to research knowledge. Their respondents listed various courses, other professional journals, books, and even newspapers (Everton et al., 2000).

Once again, this finding is consistent with the findings of Biddle and Saha (2002/2005) that the main sources of exposure to research come through professional journals and bulletins, and then professional meetings. Thus teachers, especially those who have higher levels of qualifications, and more experience, do have

adequate opportunity to learn about research and possibly incorporate it into their classroom practices. Everton and colleagues found that 49% of their teacher respondents said that exposure to research findings had caused them to improve their views about teaching and learning. However this does not mean that teachers understand the research, or that the various sources transmit it correctly. But teachers, and not just school principals, are often well-informed about research, and they use it.

A number of explanations have been put forward to document the greater dissemination of research knowledge, and indeed, to argue for the greater availability and accessibility of research knowledge. Thelwall (2002), for example, notes the increasing use of the Web as a means of disseminating research knowledge, which implies that other researchers and users actually are relying on the Web to find it. Although there are obvious cautions regarding the Web because of its unregulated nature, according to Thelwall it nevertheless has become a "primary means" of research knowledge dissemination (p. 413).

But information on the Web does not guarantee the motivation to seek research knowledge. After a review of the literature, Hemsley-Brown and Sharp (2003) suggest that the establishment of more effective communication networks between researchers and the educational practitioners may improve the desire for, and understanding of research, and to raise its credibility. A second suggestion, however, is that the teachers (and presumably school principals as well) should become more involved in the research process. This could mean several possibilities: (1) that educational practitioners become partners with academic researchers, or (2) that educational practitioners themselves become researchers. It is this second possibility that will now be considered.

Teachers can generate their own research findings. It is not unusual for schools to develop their own research projects to resolve a highly specific problem or need. In fact, in recent years there has been a growth in both the literature and practice of teachers becoming researchers, or engaging in what is known as "action research" (Ponte, 2002; Wallace, 1998). However, as Biddle and Saha (2002/2005) found, this occurs primarily in schools with a larger number of teachers who have postgraduate training. When principals have a larger number of teachers with postgraduate qualifications, they are able to turn inwards for their source of new knowledge, that is, they generate this knowledge through their own in-school research projects. Thus, the higher the levels of qualifications of teachers, the more conducive is the intellectual climate of the school, and the more likely are the teachers able to take a more professional role in research (Saha et al., 1995). This finding is consistent with the argument that schools, in which teachers can play more professional roles, are likely to be successful schools (Chubb & Moe, 1990; Peterson, 1990).

Knowledge Versus Other Criteria for Becoming an "Expert" Teacher

The focus on research knowledge as a source of teacher expertise assumes that the cognitive demands of teaching are the most important in determining teacher and school quality. Indeed, it has been argued that a focus on the cognitive dimensions,

namely teacher knowledge, teacher decision making and teacher reflection and dispositions were not only regarded as criteria for successful teachers, but also essential for teacher training programs (Grossman & McDonald, 2008). However, more recently it has been argued that relational aspects of teaching as practice, namely teaching as a craft and as a way of relating to others, particularly pupils, should be taken into account (Grossman & McDonald, 2008). This raises questions about whether education research knowledge is only linked with the cognitive dimension of teacher expertise and the teacher role. It would appear not, Everton et al. found that of the areas in which research knowledge influenced teachers, "social and personal relationships" was listed as fourth out of the ten areas listed (Everton et al., 2000). Again, this is reflected in the findings of Biddle and Saha (2002/2005) who found that both American and Australian principals most frequently recognized "teacher expectations and student achievement" as a research area, and that "teacher morale and retention" and "student and teacher engagement" were also recognized moderately. Out of 20 areas, these three were the most "relational," in that they focus on the teachers' contacts with students in the classroom.

Education research knowledge can benefit all aspects of the role of the teacher. Therefore, the evidence from research on teachers and principals (who were at one time teachers), not only advances knowledge and professional expertise, but it also has an impact on the relational aspects of the teachers' day-to-day contacts with students, parents, and educational administrators.

A Global Perspective of Educational Research Knowledge and Teachers

As already mentioned, educational research knowledge can be generated and used at a very local level, for example in individual schools, or at a broader academic or professional level. It is often assumed that research knowledge is system-specific or country-specific. However, as Biddle and Saha (2002/2005) discovered in their own research, many Australian school principals read overseas research-related journals as part of their responsibility for keeping up-to-date about ideas which might assist them in running their own schools. Ironically, this was not the case for the American principals, who only read American sources to maintain their professional proficiency. This example raises a larger question about the global nature of educational research knowledge.

Teachers are increasingly a part of a global profession. The roles, expectations and behaviors of school teachers are pretty similar in most countries of the world. Teachers may differ considerably across countries in matters such as status, pay, workload, and resources, but the core nature of the teaching role remains very similar. This convergent phenomenon was recognized already in the 1970s by Meyer et al. (1977) who argued that a world educational culture was emerging which was the base model for the expansion of education throughout the world. Although some might argue that this world or global educational culture ultimately represents a dominant or hegemonic Western model, nevertheless in matters relating to educational structures and constructions of the curriculum, this convergence is generally thought by many to

be following the best developed and available model of schooling (Ramirez & Boli, 1987; Meyer & Kamens, 1992).

However, in addition to global models of the curriculum and school structures. there exists what some call global discourses of educational practices and policy. Along with these practices and policies is a body of knowledge which relates to a range of teacher behaviors, including pedagogies and classroom practices regarding the teaching of specific subjects. This global body of knowledge is even more complex, in that it relates to the links between schooling and economies, and also to the notion of lifelong education (Spring, 2008). This widespread notion applies not only to the preparation of students for an occupational history which will require the continual upgrading of skills and knowledge, but also to teachers who themselves must have their own pedagogical and relational knowledge and skills continually upgraded. Thus when we address questions about how teachers get exposed to, and acquire educational research knowledge about teaching, we need to consider the impact of global knowledge which has become a part of cultures and which "everybody knows," or at least they think they know. Whether educational research knowledge is transmitted through university courses, teacher magazines and journals, workshops and other forms of in-service training, the Web, or school principals themselves, a significant body of knowledge exists in an ever converging global culture.

Conclusion: Teachers and Education Research Knowledge

Teachers, by virtue of their classroom duties, are at the bottom of the educational hierarchical chain of professionals. They represent the coal-face of the education system, and are the point of contact with the clients of the educational system. Educational research knowledge, on the other hand, is normally produced by professional researchers in universities or similar institutions. The audience for educational research is traditionally other researchers and higher level educational administrators. It has long been argued that this is where the impact and relevance of educational research stops. For this reason, educational research has been thought to be useless and without value to the everyday life of the teacher or the school.

However, as demonstrated in this chapter, there is evidence that the findings of educational research reach the end of the hierarchical chain, namely the teachers. Teachers are exposed to various agents which transmit relevant findings to teachers. Because teachers are not always trained as professional researchers, it is therefore reasonable that these research findings must be transmitted in a form accessible to the untrained teacher to understand and to utilize it if relevant. Thus magazines, bulletins, journals and books are a main agent for of this dissemination process. However there are other agents. Teachers also attend workshops, seminars and conferences, and search the Web, and these also constitute avenues for the transmission of research knowledge.

Teachers are not a homogeneous group, and as studies have shown, they vary considerably in qualifications and credentials. It has been disputed whether qualifications and credentials make a person a better and more effective teacher (Greene, 2005). However, it is apparently the case that teachers themselves, particularly those with postgraduate qualifications, are often producers of research knowledge. School principals, who have on their staff a large proportion of teachers with postgraduate qualifications, also are more able to generate their own research findings, and create a research climate in the school. This type of research knowledge, because it is focused and locally generated, is more likely to be relevant for the teachers in their own classrooms. On the other hand, this kind of research is less likely to enter the pool of cumulative research findings which is accessible to the wider educational community. Nonetheless, it is a good demonstration of the diversity of both educational research and its consumers.

In the end, research on teachers is sometimes research by teachers, and teachers can be both consumers and producers of research. In the present climate where the performance of all educational practitioners is made increasingly accountable for the level of student academic performance, it is important to give greater attention to the possibilities of creating a teacher community which has the knowledge and expertise to solve the challenges of a more complex and diverse student body. In this respect, education research knowledge will even more raise its profile and relevance for the high quality functioning of educational systems.

Biographical Note

Lawrence J. Saha is a sociologist of education with 30 years experience in teaching and research. He is Professor in the School of Social Sciences at the Australian National University and a former Dean of the Faculty of Arts. His main areas of educational research are social psychology of education, dissemination of education research knowledge, education and development, and youth political socialization. He was section editor (Sociology of Education) and contributor for the *International Encyclopedia of Education*, 2nd edition (Elsevier, 1994), and Editor of the *International Encyclopedia of the Sociology of Education* (Elsevier, 1997). His most recent works are *The Untested Accusation: Principals, Research Knowledge, and Policy Making in Schools* (Ablex Publishing Co., Westport Conn., 2002/2005pbk, with Bruce J. Biddle) and *Youth and Political Participation* (co-editor, Sense Publishers, 2007). He currently is Editor-in Chief of *Social Psychology of Education: An International Journal* (Springer).

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SOCIAL SCIENCE THEORIES ON TEACHERS, TEACHING, AND EDUCATIONAL SYSTEMS

Jeanne H. Ballantine and Joan Z. Spade

Schoolteacher (Lortie, 1975). Learning to Labor (Willis, 1977). Keeping Track (Oakes, 1985). The Shopping Mall High School (Powell, Farrar & Cohen, 1985). Savage Inequalities (Kozol, 1991). Reinventing Education (Gerstner, Semerad & Doyle, 1995). Tinkering Toward Utopia (Tyack & Cuban, 1995). Constructing School Success (Mehan, 1996). Who Chooses, Who Loses? (Fuller & Elmore, 1996). The Great School Debate (Good & Braden, 2000).

These are but a few examples of the plethora of books that analyze the crisis in education and classrooms and propose measures to fix problems in our education systems across the years. Each new era – political administration, economic trend, global crisis – brings new suggestions for changes in education processes. To understand how education systems work – or don't work – social scientists develop theories providing logical explanations to better understand educational systems. These theories inform research on education and provide valuable insights into classroom interactions and methods of teaching students. Some theories have limited value, but others stand the test of time and have relevance beyond the immediate circumstances that generated them.

However, the link between social science theory and schools is complicated. A major problem is that educational systems are often governed by political or ideological agendas of those in power at the time, and not on long-term planning or policy based on available theories and research. Part of this problem also lies with social science researchers who may not make findings based on social science theory readily accessible to policy makers. As with the books listed above, social science theories fall in and out of favor as the tides of educational reform change. Theories rarely drive educational reforms, rather they often carry on and support particular waves of educational reforms. As such, these social science theories shape and provide support for the context within which teachers teach, including the way we think about and carry out the responsibilities of teaching, the structure of the curriculum, how schools operate, and links to the students and communities that schools serve.

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This paper examines some major theoretical approaches researchers use to develop questions and organize their research. The purpose of this discussion is to outline some of the leading social science theoretical approaches to understanding educational systems: teachers and classroom dynamics, what works, what doesn't work, and what to do about it. The discussion is divided by levels of analysis: explanations of individual teachers and students' success and failure; classroom and school problems and attempts to resolve them; and national and global efforts to "fix" educational systems. The discussion begins with micro-level explanations and moves to macro-level theoretical perspectives.

*Why Can't Johnny Read?**: Micro-level Theories of Education

Efforts to understand "why Johnny can't read" often fall at the micro-level of social science analysis and focus on interactions and experiences in the classroom between the teachers, students and others, including peers and administrators. *Interaction theorists* assume that individuals socially construct their lives based on the environments in which they find themselves and focus their attention on the interpersonal interactions that result. With origins in the field of social psychology, symbolic interaction theories link individuals with their immediate social contexts, groups and society. As such, the classroom becomes the context for studying the interpersonal and social construction of teaching.

Symbolic Interaction Theory

"Symbols," defined as the concepts or ideas that we use to frame our interactions from words to gestures, affect children's sense of self and shape social hierarchies, including their relationships with teachers. Children are active in creating distinctions between one another and are therefore agents in creating the social reality in which they live. Teachers create these distinctions in various ways. For example, no matter what teachers call their reading groups, students quickly learn whether they are "good" or "bad" readers. Children's relationship to the classroom and learning is also shaped by their relationships to peers. Popularity, an especially powerful issue in middle-school years, is mostly a function of being visible and having everyone know who you are. The "popular" student, regardless of what year in school, has a more powerful position in teacher/student interactions.

Considerable inequality occurs in the symbols students bring with them to school. Children from families who cannot afford to purchase the desired clothing or other status symbols or even essentials for school, such as paper, are likely to be treated differently (Lareau & Horvat, 1999). In essence, these children become the "losers." Those who "win" and have access to symbolic resources, including language patterns and social experiences, are highly visible and given special privileges in the

^{*(}Flesch, 1955)

classroom or school. These students, who exude privilege in the symbols they bring with them, are more likely to develop leadership skills and generally feel good about themselves, enjoy being in the classroom, and be treated quite differently by teachers (Eder, Evans, & Parker, 1995).

Symbolic interaction theory has its roots in the works of G. H. Mead and C. H. Cooley on the development of the self through social interaction, whether in school or in other areas of life. "Individuals sharing a culture are likely to interpret and define many social situations in similar ways because of their common socialization, experiences, and expectations" (Ballantine and Hammack, 2008, p. 20). Students look to others, particularly their teachers, to understand their "place" in this culture. Common norms evolve to guide behavior. Students learn through interaction how they are different from others based on individual experiences, social class, and status. Nothing is taken for granted in interaction theory; what most people accept without question is questioned and studied. Thus, the question of "why Johnny can't read" begins with Johnny's "social construction of reality" and is embedded in the interactions are complicated by the race, class, and gender of students and teachers (e.g., Carter, 2006).

Interaction theory questions things most people don't question, such as how students get labeled and tracked in schools. Interaction theories grew from reactions to the macro-level forces of structural-functional and conflict theories, which focused on structure and processes in organizations. These macro approaches miss the dynamics of everyday school interactions and life in classrooms that shape children's futures. Interactionists ask questions about the most common, ordinary interactions between school participants. Sociologists of education using this approach are likely to focus on interactions between groups of peers, between teachers and students, or between teachers and principals; on student attitudes and achievements; on student values; on students' self-concepts and their effect on aspirations; and on socioeconomic status as it relates to student achievement. The following sections describe labeling theory, an approach developed from the symbolic interactionist perspective and several studies of the effects of teacher expectations of student performance and achievement, student and teacher constructions of reality, and schools as total institutions, including the effects of ability grouping (Ballantine & Hammack, 2009).

Labeling Theory

Erving Goffman (1967) proposed the process of "labeling theory". If Johnny is told often enough that he is stupid and can't do the work, Goffman argues that the label becomes a self-fulfilling prophesy for him and the student comes to incorporate the label into his sense of "self." Using labeling theory we can better understand how teacher expectations of students' race, class, ethnic background, gender, religion, or other characteristics affect students' self-perceptions and achievement levels.

Labeling theory helps us to understand how micro-level interactions in the school contribute to individuals' formation of their sense of "self." Young people from 6 to 18 years old spend much of their time in school or school-related activities;

therefore, *student* is a status that has enormous impact on how one sees oneself. The student's sense of self is reflected back to the individual by interactions within the classroom and molds one's sense of competence, intelligence, and likeability. The constant reinforcement of particular "self" concepts by peers and teachers creates an inevitable framework for teaching and teachers' interactions with students – winners as well as losers.

Another example of how social interaction in schools contributes to student achievement is the institutional processes of tracking and ability grouping. An early study found that students in classrooms where the teachers were told that students in their classes were "late bloomers" and would "blossom" that year, achieved much more than students in classrooms where the teacher had no expectations for students, even though students in both classrooms were similar in ability (Rosenthal & Jacobson, 1968).

Other statuses provide a basis for many interactions in schools, such as race, ethnicity, class, and gender. For example, Sadker and Sadker (1994) found clear and distinct patterns in the way teachers interact with boys and girls in the classroom. Teachers tend to call on boys more, wait longer for boys' responses to questions, and expect boys to "act out" more in the classroom. Girls, on the other hand, are expected to be quiet and compliant, and teachers tend to "do" things for girls, rather than push them to succeed. Given how gendered expectations shape interactions in the classroom, it is not surprising that girls tend to struggle with self-esteem issues at adolescence (AAUP, 2001).

The labeling of students, along with the results of tracking and ability grouping, reproduce social class inequalities in society. Low-income students are often placed in low-ability groups, which can become a "life sentence" affecting achievement and future opportunities. Interactions between participants in the school and classroom give insight into the labeling process. For example, in a classic study, Rist demonstrated how teacher expectations of students based on categories such as race, class, ethnicity, and gender affect student perceptions of themselves and their achievement (Sadovnik, 2008). The result is that low-income students are often placed in lower-ability groups not related to their actual ability (Rist, 1970, 1977; Sadovnik, 2008).

Some theorists have attempted to synthesize micro- and macro-level theories, arguing that both must be considered if we are to understand educational systems. Such attempts led Bernstein (1990) to look at how children's speech patterns reflect their class background, linking language and educational outcomes. Bernstein's "code theory" explores the role of student speech patterns on their experiences and placement in schools, and later in societies, contending that students from working class families have different speech patterns than those from middle- and upper-class families. He links language with educational processes and outcomes (Sadovnik, 2008). The point is that schools are generally middle-class institutions; students from each social class bring different speech patterns and behaviors into the schools, resulting in differential treatment from teachers and the school system. The consequences for teachers and teaching, Bernstein would argue, is that school processes, academic outcomes, and children's interactions with teachers at the micro level unintentionally result in reproduction at the macro level.

Rational Choice Theory

Rational choice or exchange theory is based on the assumption that there are costs and rewards involved in our interactions. In education, rational choice theorists assume that students, teachers, and administrators weigh costs and benefits in making decisions about teaching in the conduct of everyday school experiences. Costs and benefits are not only financial, but include physical well-being, emotional health, relationships, self-esteem, or other factors. If benefits outweigh costs, the individual is likely to make the decision to act in order to continue receiving benefits; if costs outweigh benefits, the individual will seek other courses of action.

Students who are considering dropping out of school likely go through some analysis of benefits of staying in school such as ability to get a better job, versus costs to themselves, such as a battered self-esteem in school. Students may also make such an analysis in terms of whether to do homework, or even listen to a teacher. Whether they have assessed the costs and the benefits correctly from our perspective is not the point; the issue is how individuals evaluate the benefits and costs in making what theorists describe as a "rational choice."

The issue of teacher retention can also be interpreted using rational choice theory. Teachers have an extremely high dropout rate with roughly half of all new teachers in the United States currently leaving the profession within 5 years (Lambert, 2006). Rational choice theorists would explain this in terms of the perceived costs – poor salary for a college graduate; lack of respect from parents, students, and administrators; some 12- to 14-hour days for 9 months of the year; lack of professionalism in treatment of teachers in the "No Child Left Behind" U.S. federal program; lack of democracy in the schools (Dworkin, Saha, & Hill, 2003). Teachers compare these to the benefits of teaching – the feeling of making a contribution to society and helping children, time off in the summer, and enjoying aspects of teaching, coaching, or directing. The costs today are seen by many teachers as higher than they once were, so they leave the profession either literally or figuratively, resulting in high teacher burnout and dropout rates (Dworkin, 2007).

Reciprocity in relationships, what we owe others in interactions, binds individuals and groups with obligations. For example, students learn and teachers are rewarded. Rewarded behavior is likely to continue. Rational choice theories are helpful in trying to understand decision making of individuals in schools and of teaching and classroom dynamics.

The Credential Society*: Macro-level Theories of Education

Whereas the interaction approach focuses on small-scale interactions between individuals and small group members within the larger systems, macro-level theories examine educational institutions within large-scale societal and cultural systems.

^{*(}Collins, 1979)

Within macro-level frameworks, teachers and teaching are considered part of a larger social system (Brookover, Erickson, & McEvoy, 1996).

Functional Theory

Functional theory explains how education systems work by focusing on what purpose education serves in societies. This theory starts with the assumptions that interdependent parts of an education system work together to make a functioning whole and that there is a relationship between schools and other institutions in society. Each part of society - education, family, political and economic systems, health, religion - is interdependent and works together to create a functioning society. Another key component of functional theory is the focus on questions concerning the structure and functioning of organizations. Therefore, each part of an educational system - teachers, students, administrators, etc. - work together to meet the needs of that unit. In functional theory, each part plays a role, contributing some necessary activity to the functioning and survival of the whole just as parts of the body work together to keep us healthy and active. The focus of functional theory is on a balanced system with consensus, shared goals, and mutually adaptive purposes uniting groups. The functions education provides are many, including creating common bonds based upon shared goals that hold individuals and groups in the society together. For example, functional theorists argue that education creates and sustains a hierarchy of difference based upon merit which we all accept based on the belief that how much we achieve makes us worthy of success in the larger society.

Functional theories of education originated in the work of Emile Durkheim (1858– 1917) who contributed both a method for viewing schools and an explanation of how schools function to maintain order in societies by providing a common moral grounding necessary for social cohesion (Sadovnik, 2008). Durkheim outlined a definition of education which has guided the field, what he saw as concerns facing education, the importance of education in creating moral values as the foundation of society, and a definition of the field for future social scientists.

In *Moral Education* (1962), Durkheim outlined his beliefs about the function of schools and their relationship to society. Moral values are, for Durkheim, the foundation of the social order, and society is perpetuated through its educational institutions which help instill values in children. Any change in society reflects a change in education and vice versa. In fact, education is an active part of the process of change. In this work, he analyzed classrooms as "small societies," or agents of socialization. The school serves as an intermediary between the affective morality of the family and the rigorous morality of life in society. Discipline is the morality of the classroom, and without it the classroom can become like an undisciplined mob, according to Durkheim. Because children learn to be social beings and develop appropriate social values through contact with others, schools are an important training ground for social skills, the place where students learn the "rules." Teaching, according to Durkheim, was much broader than just academics.

Functionalists also argue that the passing on of knowledge and behaviors is a primary function of schools, one necessary to maintain order and fill needed positions in society. Following Durkheim, sociologists see the transmission of moral and occupational

education, discipline, and values as necessary for the survival of society. Thus, teachers play a very important role in carrying out the functions that schools provide for the larger society.

While Durkheim was concerned primarily with value transmission for stability of society, he did not consider the possible conflict between this stable view of the values and skills and what is necessary for changing, emerging industrial societies. He also argued that education should be under the control of the state, free from special interest groups; yet most governments are subject to influence from interest groups and to trends and pressures affecting society. Pressures from the school's environment in the areas of curriculum content, for instance, are very real.

Instrumental in the development of modern functional theory was the work of Talcott Parsons. Parsons (1959) also saw education as performing certain important tasks or "functions" for society, such as preparing young people for roles in a democratic society. Parsons argued that female elementary school teachers (as he assumed all elementary school teachers should be) play a role in transitioning children from the home and protection of mother to schools where a more impersonal female role socializes children to meet the less personal and more universal demands of society (Parsons, 1959). This linking of teachers to their role in the larger society is only one example of how functionalists have viewed the role of teachers in society (Ingersoll, 2004).

Other functionalists argued that some degree of inequality was inevitable in society because the most challenging positions required attracting the most talented individuals. Achievement in schools was to be based on merit, not one's status in society. The function of teaching and education thus supported capitalism, which was based on this merit system. As a consequence, individuals who would spend time and money on the education necessary to fill important roles would receive higher rewards in terms of income and prestige (Davis & Moore, 1945).

Today, functional theory builds on the base provided by Durkheim, Parsons, and others. For example, Dreeben (1968), *On What is Learned in School*, considers the social organization of schools, while others consider the values taught in school and how these lead to consensus in society and prepare students to participate in society. The following outlines in more detail the major functions that education serves in societies, among them socialization and enhancing personal and social development, selecting and training workers, promoting change and innovation, and various latent functions that educational systems perform (Ballantine and Hammack, 2009).

Socialization: Teaching Children to be Productive Members of Society. Societies use education to pass on essential information of a culture – values, skills, and knowledge necessary for survival. This process occurs in formal classrooms as well as in informal settings. In industrialized and developing countries, elders and family members cannot teach all the skills necessary for survival. Formal schooling emerged to meet the needs of these societies, furnishing the specialized training required by rapidly growing and changing technology. Schools also provide the cultural socialization important in heterogeneous societies, where diverse groups must learn rules that maintain social cohesion and order. Children receive socialization messages from teachers, the formal curricula, and the routine practices and rules of everyday classroom life (Brint, Contreras, & Matthews, 2001; Gracey, 1967). School socialization enhances personal and social development. Most people remember their first day of elementary school. It marks a transition between the warm, loving, accepting world of the family and a more impersonal school world that emphasizes discipline, knowledge, skills, responsibility, and obedience. In school, children learn that they are no longer accepted regardless of their behaviors as they were in their families. They must meet certain expectations and compete for attention and rewards. They also must prepare to participate in their society's political and economic systems, in which a literate populace is necessary to make informed decisions on issues.

Citizens expect schools to respond to the constant changes in societies. In multicultural societies such as Israel, France, and England, school socialization helps to integrate immigrants by teaching them the language and customs and by working to reduce intergroup tensions. The challenge is to provide educational opportunities to all groups.

Selection and Training of Individuals for Positions in Society. Most people have taken standardized tests, received grades at the end of a term or year, and asked teachers to write recommendation letters. Functionalists see these activities defining "merit" as a crucial part of the selection process prevalent in competitive societies with formal education systems. Schools distribute credentials – grades, test scores, and degrees – that determine the college or job opportunities available to individuals in society, the fields of study individuals pursue, and ultimately individual positions in society. For example, the different criteria or credentials for entering college mean some individuals will not get into the "best" schools or even to college at all; thus, some individuals are destined to fill lesser positions in society.

Promoting Change and Innovation. Institutions of higher education are expected to generate new knowledge, technology, and ideas, and to produce students with up-to-date skills and information required to lead industry and other key institutions in society. In our age of computers and other electronic technology, critical thinking and analytical skills are essential as workers face issues that require problem solving rather than rote memorization. Thus, the curriculum must change to meet the needs of the social circumstances. Familiarity with technological equipment – computers, internet resources, electronic library searches, and so forth – become critical survival skills for individuals and society. Differences in training and knowledge supports a social hierarchy by reducing chances for social mobility, yet may also function to fill jobs that require little advanced training and are otherwise unappealing, such as collecting trash.

Latent Functions of Education. In addition to these planned, formal functions, students experience latent functions – unintended, unorganized, informal results of the educational process. For example, schools keep children off the streets until they can be absorbed into productive roles in society, serving an informal "babysitting" function. Schools also provide young people with a place to congregate, which in turn fosters a "youth culture" of music, fashion, slang, dances, dating, and sometimes gangs. At the ages when social relationships are being established, especially with the opposite sex, and colleges serve as "mating" and "matching" places for young adults, schools are the central meeting place for the young. Education also weakens parental control over youth, helps them begin the move toward independence, and provides experiences in large, impersonal secondary groups (Ballantine & Roberts, 2007).

Functional theorists believe that when the above social functions are not adequately addressed, the educational system is ripe for change. The structure and the processes within the educational institution remain stable only if the basic functions are met.

Government proposals for educational reforms are stimulated by new knowledge and technologies, indications of falling behind in international comparisons, and high unemployment and a poorly trained labor force.

Conflict Theory

The following section discusses the conflict perspective, which proposes a view of why some students "make it" and others don't (MacLeod, 1995). There are several branches of conflict theory, all of which assume a tension in society and its parts created by the competing interests of individuals and groups. Educational systems play an important role is sustaining the hierarchy of inequality. In contrast to functional theory, conflicts occur even when teachers, students, parents, and administrators follow the rules and society is stable. Each group may obey the rules even though they do not always agree because they may not see alternatives or follow the rules for fear of consequences. However, conflict theory includes different explanations of the role of teachers and the process of teaching in education systems and conflict theorists disagree on whether participants in the education system always conform or have no choices. The roots of conflict thought are outlined below, and contemporary conflict theory, originating in the 1960s, is discussed. Recent theories integrate ethnicity, race and gender issues and add politics and culture to the traditional Marxist class and economic issues. In addition, issues of "reproduction and resistance" are recent threads in the conflict tradition.

Conflict theorists studying education systems argue that differences in achievement of students is not based on their ability or intelligence; rather schools reflect the needs of the powerful, dominant groups in society and serve to perpetuate the capitalist system. Students have different teaching and learning experiences resulting from teacher expectations that affect their achievement as well as from resources that support individual schools. There is also debate about the role that differential funding of schools and other resources have on achievement of students.

In a busy classroom, with many tasks to accomplish (including meeting standardized test goals), teacher expectations for students are shaped quickly and based upon the immediacy of the situation. These expectations can have a major impact on overall academic achievement. Research finds that poor and minority students are more likely to be placed or tracked into lower reading and academic groups with lower-level curriculum, placements which are hard to change. Students from upper and middle-class backgrounds receive more mentally challenging curricula that prepare them to think creatively and make decisions, while lower class students experience less challenging and stimulating curricula and are more likely to drop out of school. Thus, the labels students receive from teachers and the education system define themselves as successful or not and both produce and support inequalities in society. Conflict theorists challenge the functionalist assumption that what schools teach is ideologically and politically neutral and that schools are based on meritocracy with each child able to achieve to the highest level of his or her own ability. Instead, conflict theorists see the system of meritocracy as damaging to some students' futures and places in society.

Origins of conflict theory are situated in the writings of Marx (1971) and later Max Weber (1961, 1958a, 1958b). Karl Marx (1818-1883) laid down the foundations for conflict theory based on his outrage over the social conditions of the exploited workers in the class system resulting from the Industrial Revolution and the growth of capitalism. He contended that society's competing groups, the "haves" and the "have-nots," were in a constant state of tension, which led to conflict over resources and the possibility of struggle. The basis of this struggle is that the "haves" control economic resources and thus have power, wealth, material goods, privilege (including access to the best schools and education), and influence; the "have-nots" present a constant challenge as they seek a larger share of society's economic resources. This struggle for power helps determine the structure and functioning of organizations and a hierarchy of power that evolves as a result of unequal access to resources in society. The "haves" often use coercive power and manipulation to hold society together (Sadovnik, 2008), but this theory recognizes that change is inevitable and sometimes rapid, as conflicts of interest can lead to the overthrow of existing power structures. Indeed, Marx believed that class conflict would continue until the capitalist system was overthrown and replaced by an equitable system.

Marx argued that schools created and maintained inequality by teaching students an ideology that served the interests of the rich and instilling in students a sense of "false consciousness." That is, students in schools learn to accept the myth that all have an equal chance of achieving in what they believe is a meritocracy; thus, those who fail do so because they are not capable of succeeding. Students learn to internalize their own lower position in society and accept their lowly fate because they are not "good enough," thus legitimizing the powerful position of capitalists.

Weber's Contributions to the Sociology of Education

Max Weber (1864–1920) was said to have argued with Marx's ghost because he believed that conflict in society was not based solely in economic relations. He argued that inequalities, and potential conflict, were sustained in different distributions of status (prestige), and power (ability to control others) and class (economic relations). He believed it is status, power, AND class that result in the constant possibility of conflict. His focus was on power relationships between groups and differences in status that create a basic structure of inequality in societies. Weber saw the basis for class conflict as much broader than economic inequality.

Weber (1958a, 1958b) spoke of the "tyranny of educational credentials" as a prerequisite for high-status positions that shape the classrooms in a society. This theme is also discussed by Randall Collins in *The Credential Society* (1979), another conflict theorist following in Weber's tradition. He focuses on "credentialism," which is a technique of increased requirements for higher-level positions used by more advantaged individuals to further their status (Collins 1979). The rapid expansion of educational qualifications, faster than the number of jobs, has led to "credential inflation," yet what the school curriculum teaches is not necessary for most jobs. The result is that the credentials needed for jobs keep rising and teachers' roles change in response to these external pressures.

In some ways, Weber's unique approach to studying status groups and power on a macro level overlaps with social interactionist analyses, which provide an interpretive view of how people define situations in schools. Weber argues that there are "insiders" whose status culture is reinforced through the school experience, and "outsiders" who face barriers to success in school. As we apply these ideas to explain the situation of poor and minority students today, the relevance of Weber's brand of conflict theory becomes evident. His theory deals with conflict, domination, and status groups struggling for wealth, power, and status in society. Education is used by individuals and society as a means to attain desired ends. Relating this to Karl Marx's writings on conflict theory, education produces a disciplined labor force for military, political or other areas of control and exploitation by the elite. Status groups differ in property ownership, social standing, and power, much of which is achieved or reinforced through schools.

Weber, however, can also be considered a functionalist whose writings using crosscultural examples and exploring preindustrial and modern societies, shed light on the role of education in different societies at various time periods (Weber, 1958a). In preindustrial times, education served the primary purpose of a differentiating agency that trained people to fit into a way of life and a particular "station" in society. With industrialism, however, upwardly mobile members of society vying for higher positions in the economic system put pressure on schools to maintain or gain status at the same time that educational institutions became increasingly important in training people for new roles in society.

In his essay "The Rationalization of Education and Training" (1958b), Weber points out that rational education develops the "specialist type of man" versus the older type of "cultivated man," described in his discussion of educational systems in early China. Again we see the relevance of Weber's writings: Today's institutions of higher education are debating the value of vocationally oriented education versus education for the well-rounded person.

While some of Weber's writings seem decidedly functionalist and overlap with macro-level analyses, the overall body of Weber's work opened up many different ways to understand the role of education in society and new approaches to the topic, including a broader approach to explanations using conflict theory.

Conflict Theory Today

Weber and Marx set the stage for the many branches of conflict theory advocated by theorists today. Research from the conflict theorists' perspective tends to focus on those tensions created by power and conflict that ultimately cause change. Some conflict theorists, following from Marx's emphasis on the economic structure of society, see mass education as a tool of capitalist society, controlling the entrance into higher levels of education through the selection and allocation function and manipulating the public. Marx argued that schools contributed to a "false consciousness," the equivalent of teaching students that the oppressive conditions which shape their lives cannot be changed and they must simply accept their situations. Many conflict theorists believe that until society's economic and political systems are changed, school reform providing equal access to all children will be impossible (Bowles & Gintis, 1976).

Other theorists apply early conflict theory arguments to the school and classroom level of analysis. For example, Willard Waller believes that schools are in a state of constant potential conflict and disequilibrium; teachers are threatened with the loss of their jobs because of lack of student discipline; academic authority is constantly threatened by students, parents, school boards, and alumni who represent other, often competing, interest groups in the system; and students are forced to go to schools, which they may consider oppressive and demeaning (Waller, 1965, pp. 8–9). Although larger conflicts between groups in society may be the basis for these within-school patterns, the focus of some conflict theorists is not on these larger societal reasons.

An excellent example of how more recent theorists have applied the larger societal explanation is seen in Bowles et al.'s (1976) "correspondence theory" which takes a more macro view of schools, particularly as schools function to reproduce inequality and create class and power differences in societies. They argue that schools reproduce capitalist society through the student selection and allocation processes that create hierarchies within societies, socializing students into these hierarchies of power and domination, and legitimizing the hierarchies by claiming they are based on merit. Following the assumptions of Marx, they argue that school structure is based on the needs and standards of the dominant group in society, capitalists, and thus serves the purposes of that group.

Status attainment theories link family background to occupational attainment, while also accounting for the educational attainment of individuals (Haller & Portes, 1973). Students both bring into and take away from schools different cultural competencies. The bottom line is that schools directly and families indirectly motivate higher class students to achieve and decrease ambitions of others, creating a "false consciousness" (Apple, 1996, 1993; Vanfossen, Jones, & Spade, 1987).

Reproduction and Resistance Theories

Expanding upon Marx's conceptualization of false consciousness, another branch of conflict theory called *cultural reproduction and resistance theories* argues, very generally, that those who dominate capitalistic systems mold individuals to suit their own purposes. These theorists considered how forms of culture are passed on by families and schools to shape individuals' views of their worlds (Bourdieu & Passeron, 1977; Sadovnik, 2008).

The concept of *social reproduction* was developed in the late 1960s and early 1970s in Europe to explore the claim that schools actually *increase* inequality in the process of "teaching." During this period when equality was a central interest, the idea that schools might be contributing to societies' woes led to studies of the possibility that schools and families were actually perpetuating social class structures. Following from Marx, schools were viewed as part of a superstructure along

with family, politics, religion, culture, and economy, organized around the interests of the dominant capitalist group. The dominant group needed workers with good work habits, skills, and loyalty to produce products and services needed by capitalists in exchange for their labor. Schools served the needs of the dominant group by teaching students their roles in society and perpetuating the belief that the system was a fair and merit-based way to select workers. Two concepts are particularly critical in the development of reproduction and resistance theories – cultural capital and social capital.

Cultural capital refers to cultural practices, including language and experiences such as visits to museums, that provide knowledge of middle- and upper-class culture – the culture of schools – which allows students from the upper classes to gain more and better educations, continue membership in the dominant class, and convert their home and school advantages to economic advantage (Lareau, 1989). The concept of *cultural capital* was introduced in the 1970s primarily by Pierre Bourdieu. Dominant groups pass on privilege to their children via exposure to the dominant culture so that students with cultural capital know how schools work and what to do to be successful (Bourdieu & Passeron, 1977). The amount of "cultural capital" one has is an indicator of one's status; families and schools differ in the amount of "cultural capital" they provide to children. For instance, an elite preparatory school provides more of the cultural capital needed to gain wealth and power in Western societies than does a poor, urban school. Reproduction theorists study the cultural processes by which students learn knowledge and what knowledge is transmitted.

Schools reproduce inequality both in the interactions and the structure of education. For example, using different curricula for students in different tracks creates a system of educational inequality that perpetuates differences in cultural capital. While the assignment of students to learning groups is supposed to be based upon explicit criteria such as test scores or completion of previous work, in actuality cultural capital plays a considerable role in who is assigned to groups. As early as pre-school, children experience different expectations from teachers (Lubeck, 1985). As noted earlier, Rist (1977) found that children were assigned to groups in kindergarten based upon dress and speech patterns. Vanfossen et al. (1987) and Lucas (1999) found that family social class background was a strong predictor of the high school "track" in which students were placed. The end result is that students from working class backgrounds learn more basic skills and to follow rules because they are "behind" and are expected to cause problems in the classroom. Those from upper classes learn how to make decisions, be creative and autonomous, and prepare for college (Anyon, 1980; Miller, Kohn, & Schooler, 1985). At the college level, students are again tracked into two or 4-year educations with differences in the curriculum, goals for educational outcomes, and economic results for students (Pincus, 2002, 1980).

The process of developing cultural capital usually begins in the students' families where they are socialized into the interests, language patterns, tastes and consumption patterns of their social class. For the dominant class this includes exposure to theater, museums, art collections, books, classical music, and patterns of interaction that are found among the elite in society. Not only do students coming from these homes do better academically and have higher academic qualifications, but this early socialization can lead to later economic capital. Often acquisition of cultural capital is an unconscious process, occurring through exposure and contacts with others who value cultural capital. Of course, all students are exposed to cultural capital of some sort; however, the cultural capital of disadvantaged groups does not facilitate school achievement.

Teachers also bring varying degrees of cultural capital to schools and classrooms. Some teachers come from working- and middle-class backgrounds and bring that cultural capital to the education system, both in their own training and how they teach others. However, in some cases the students they teach may bring a different cultural capital to the classroom, cultural capital that is either higher or lower in the hierarchy of power and wealth. When families transmit cultural capital to their children, this facilitates how schools and teachers transform cultural capital into educational capital, and ultimately economic capital. In addition, parents with "higher" cultural capital tend to be more involved in their children's schooling and more able to provide their children with stronger educational experiences (Lareau, 1989; Saporito & Lareau, 1999).

Of key importance is the role cultural capital plays in *reproduction* (Bowles et al., 1976). Access to the dominant class depends on capital gained from cultural, economic, social and symbolic sources. The bottom line is that students from the dominant class obtain more (and often higher quality) education. This type of analysis can apply to understanding the process of reproduction at the individual student or teacher, classroom, school, or system level of analysis.

The concept of cultural capital has been used in a number of studies of schools and classrooms. Consider McLaren's study (1989) of his experiences as a middleclass white teacher teaching in an inner-city school, facing violence and hostile parents: "his difficulties to communicate and motivate the disadvantaged students from minority groups, public housing, and broken families were due to his dissimilar white, middle class background...this cultural chasm did not occur while he worked in a suburban school at an early time" (Madigan, 2002, p. 123).

Social capital was introduced by James S. Coleman (1988), but with a rich history leading up to his usage of the term. *Social capital* refers to the social resources students bring to their education and future engagement in school or community, resulting in building of networks and relationships they can use as contacts for future opportunities. Ultimately, these networks are connections that make achievement possible and connect individuals to the larger group. Several researchers have applied this concept to the study of students, teachers and teaching. For instance, connections students make in elite private schools and alumni connections through private schools and colleges enhance future economic capital.

Coleman attempted to provide explanations for the reproduction of social class taking place in schools, or the "problem" of achievement gaps between advantaged and disadvantaged children in schools. Several studies besides Coleman's (1988) have tried to explain the effect of educational systems on student outcomes using the concept of *social capital*. One study of social capital shows how resources in the family, community, and school serve as capital assets for improving student academic performance and psychological well-being (Schneider, 2002, p. 548). The study also points out that active involvement of parents at home with their children on homework and educational decisions can influence social capital and future opportunities. For example, a study of Mexican-origin high school students, and the student advice networks and friendship networks, especially those of teachers and other school personnel, found that whether students were bilingual made a difference in their access to social capital. The access to social capital that was particularly important were those networks that connect them to future opportunities (Stanton-Salazar & Dornbusch, 1995).

Resistance theorists go beyond reproduction theories by arguing that teachers and students are not passive participants in the school process, and that they do not always follow the expectations that result in social reproduction. For example, students may resist their socialization into certain roles in society (Willis, 1977) just as teachers do not have to accept their role in facilitating reproduction. They may work with all students to give them equal chances in the system. Teachers can empower students with curricula that are participatory, affective, problem solving, multicultural, democratic, interdisciplinary, and activist (Shor, 1986).

Conflict theory approaches discussed above imply that schools and the classroom are part of a volatile system that is shaped by power and control within the society. These theorists argue that there is the ever-present possibility of major disruption because of the unequal distribution of status, cultural capital, opportunity, and other resources. Conflict theory is useful in attempting to explain situations of unequal power; however, critics argue that the connection between curriculum and capitalism has not been laid out clearly and that little empirical data has been presented to substantiate the claims. Also, this theory does not offer useful explanations concerning the balance or equilibrium that does exist between segments of a system or the interactions between members of the system. For the most part, neither conflict theory nor functional theory focuses on the individual, the individual's "definition of the situation," or interactions in the educational system (Ballantine and Hammack, 2009).

All theories evolve. As described, conflict theory has gone through stages that attempted to explain the educational systems of the time and to react to previous theories that were inadequate to explain concerns of the education system. Recent trends see schools as "contested terrain" for determining curricula that meet diverse needs. The differential access to power based on race, class and gender is now a dominant theme in this recent literature.

Pedagogy of the Oppressed*: Postmodernism

Postmodernism is a theoretical perspective that arose in direct contrast to modernism. *Modernism* was an educational movement that focused on an all-encompassing macro-level explanation of social and economic industrial societies and the idea of progress through science and technology. Modernists stressed the Enlightenment ideas of reason and principles such as equality, liberty, justice, and a belief that such principles could be achieved rationally through scientific exploration (Sadovnik,

^{*(}Freire, 1970)

2008). *Postmodernism* has developed in reaction to the perceived failures of modernism to envision a just system for all groups; it attempts to build on modernism and goes beyond the industrial world of the modernists to create a theory that is more relevant, in their view, to the needs and realities of the world of today, a world in which differences and inequality predominate.

Postmodernists stress the importance of theories relevant to local issues rather than all-encompassing global issues; the connection between theory and practice; and democractic, antitotalitarian, and antiracist ideas. They call for respect and understanding of difference based upon the fact that knowledge is created locally, in our own understanding of the situation. Sometimes called "critical education theory," many postmodern writers including Paolo Freire (1970, 1987) and H. Giroux (1983a, 1983b, 1991) are following the lead of earlier theorists, but focus their explanations on the individual, not the larger societal structure.

Postmodernism honors human diversity and the variations and ambiguity in the way different people view situations and learning. It also recognizes the political setting in which education occurs. Education results from choices made with reference to sets of values and interests in the community and which are entangled in power structures. Postmodernism does not reject regularity, but demands that irregularity be accepted as well. For education this means that curriculum should be integrated within the contexts of individual children's lives and interdisciplinary in nature, that universal skills such as critical thinking should be stressed, and that individual children can reach a common goal by different paths. The locus of control in this model is at the individual school level, and children's achievements should be measured in many ways: tests, portfolios, performances, and projects – whatever works best for the children in that school (Bernstein, 1990; McLaren & Hammer, 1989; Sizer, 1992).

Sadovnik (2002, pp. 605-607) outlines six themes that characterize postmodernism:

- Theorists need to focus on local needs and explanations of specific social situations, such as classrooms. Local situations cannot be understood by using metatheories or grand theories that attempt all-encompassing explanations of the world.
- 2. Though not the first or only theorists to propose this, postmodernists see connections between theory and practice; the two should not be separated, but in fact affect each other with theory stemming from the practice of teaching.
- 3. Schools are sites for democratic transformations, as seen in Dewey's early writings, and build upon the ideas of emancipation and anti-totalitarian theory and practice.
- 4. Postmodern thought moves beyond what it sees as a European-centered focus and patriarchal thoughts that fail to address concerns of women and minorities. Encompassing "the voice of the other" is a major tenant of this theory. Education is seen by some as a key to democratizing society and recognizing the needs of all members.
- 5. Knowledge is socially constructed and related to structures of power and domination.
- 6. By encouraging dialogue about differences between social class, race, ethnicity, religion, and status such as student and teacher, understanding can be reached.

A key idea of postmodernist thought and critical education theory is the expectation that educators should identify and correct problems in the education systems. By recognizing the "voices of others" that have been kept out of the dialogue due to racism and sexism, educators can reshape the practice of schooling. Giroux (1991) suggests incorporating the concept of a "just society" into the curriculum to meet the needs of inequality in today's society. Teachers can play a role in helping to transform students' consciousness, and ultimately transform society to be democratic and civil.

Postmodern theories of education not only critique education but provide a guideline for transforming education systems and teaching. The emphasis on understanding local situations and on creating dialogue across differences can be carried out in practical ways such as revising the curricula and adapting more open methods of pedagogy and assessment. Indeed, postmodernists want to transform the teachers' role into one of inciting social change. Yet critics argue that postmodernism to date has tended to be more philosophical than practical and lacks practical ideas for the classroom, even though the theoretical framework focuses on the classroom and advocates for social action.

Failing at Fairness*: Feminist Perspectives on Education

Feminist theorists have echoed the need to "hear" other voices in the education system, in particular women's voices, and to pay more attention to the situation of women. Much of the history of social science theory is a history interpreted by men, generally white men in the European tradition. Feminists see the world from a different perspective, one that represents a sometimes forgotten element in past theoretical interpretations of education systems as well as the curricula that are presented, one in which women were essentially denied a place for most of the history of the United States (Deem, 1980; Spender, 1987).

While there are many different feminist theories, we mention three ideas that influence the understanding of schools (Weiner, 1997). Early liberal feminist writings on gender and schooling expressed the concern that girl students and female teachers faced certain injustices. Different theorists related inequalities faced by women to differential access, different treatment and exploitation, patriarchy, and male dominance. This led to examination of educational policy and how it affected girls, women, and their future opportunities. Thus, as postmodernists were pointing out that certain voices were not being heard, feminists were setting an agenda for research and writing to expose problems faced by women (Dillabough & Arnot, 2002, p. 573). Unfortunately, while women have made many gains in educational attainment over the last century, many inequalities remain. As late as 1994, Sadker and Sadker found that girls were treated differently in the classroom – that girls were not called upon as often as boys and essentially not challenged as much as boys in the same classrooms. This discrepancy in classroom "treatment" likely contributes

^{*(}Sadker & Sadker, 1994)

to a disproportionate number of men who go on to higher paying, more prestigious careers as indicated by the fact that fewer women pursue mathematics and science degrees (Jacobs, 1996).

Not all feminist scholarship on education focuses on describing the inequalities. Feminist theory can be used to criticize school practices, such as the assumptions schools use to connect parents, but meaning mothers, to engage in their children's educational experiences. For example, Stambach and David (2005) argue that school choice programs operate on the gendered assumption about family and employment, implying that mothers should be involved in their children's education and schools, as do many other programs that reach out to parents. Although much of feminist scholarship focuses on the critical perspective at the macro-level, radical feminists also link theory to practice, as is the case with critical theorists, resulting in connections between policy, such as school choice, and research.

Early feminist theories of education were criticized for having a middle-class bias and not adequately recognizing issues of concern for women of color, women from other cultures, nontraditional gender and sexual orientations, different ethnic or global identities, or political persuasions. As a result, various branches of feminist theory of education have arisen (Weiner, 1997) to address gender issues as they intersect with other categories of difference and inequality. It is expected that these multiple feminisms will result in a variety of challenges to educational practices and systems in addressing the teaching and learning experiences of all young women.

Conclusion

Sociologists and social scientists draw from a long and broad tradition of social science and sociological theories, beginning with the coining of the word "sociology" by August Comte in 1838, to understand the processes of teaching. These theories provide a range of explanations that can be used to examine issues and problems in educational systems and classrooms, and better understand the role of teachers and teaching in schools and society. These theorists help us to think differently about why schools work as they do and what shapes the daily interactions in the classroom between teachers and students. Theories are valuable because they provide templates for considering solutions and understanding why things happen as they do. This broad range of theories presents many alternative ways of thinking about schools and is valuable as policy makers and researchers try to find solutions to the multitude of problems plaguing education today, in both developed and developing countries. To understand how the practices, processes and interactions in our classrooms came to be and the consequences of these activities for the future of both individual students and society at large.

Biographical Notes

Jeanne H. Ballantine is professor of sociology at Wright State University in Dayton, Ohio. She received an MA from Columbia University and a PhD from Indiana University, with a specialty in sociology of education. She has been teaching and writing for over 30 years and has written or coauthored several texts: *Sociology of Education: A Systematic Analysis, Schools and Society, Teaching Sociology of Education, Sociological Footprints* and *Our Social World: Introduction to Sociology*. She has also published in other areas, including gender and teaching of sociology, and has been an active member of sociology of education organizations including the ASA Section on Sociology of Education. She has won numerous awards including the ASA Distinguished Contributions to Teaching Award and has taught in countries around the world.

Joan Z. Spade is professor of sociology at the State University of New York, College at Brockport in Brockport, New York. She received her MA from the University of Rochester and her PhD from the State University of New York at Buffalo. She has been teaching and writing in the field for over 20 years and is coeditor of *Implementing Educational Reform: Sociological Perspectives on Educational Policy* and author of articles in *Sociology of Education* on stratification and grouping practices in education. She also publishes in other areas, including gender and family, and is coeditor with Catherine G. Valentine of *The Kaleidoscope of Gender: Prisms, Patterns and Possibilities*. Currently she is researching academic governance in higher education. She is a member of ASA, including the ASA Section on Sociology of Education, Eastern Sociological Society, and Sociologists for Women in Society.

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DEVELOPMENTS IN QUANTITATIVE METHODS IN RESEARCH INTO TEACHERS AND TEACHING

John P. Keeves and I Gusti Ngurah Darmawan

Introduction

There is perhaps no situation greater than that of teachers in classrooms where sizeable groups of people work together under the direct guidance of a single person for longer periods of a day on a regular basis and for sustained periods of time than that of teachers in primary school classrooms. In the home, the group is smaller, the guidance is shared between two and more people, the situation is similar but with longer periods of time involved where similar problems of analysis arise. Both situations present specific methodological challenges, involving multilevel and multivariate analysis. However, the size of school and classroom groups and the relative ease with which data can be collected, has led to a break-through occurring in the analysis of data in the field of education. Nevertheless, the sensitivity of teachers to intrusion into their closed operational setting has led to relatively little use being made of the advances that have occurred in these quantitative analytical procedures in the investigation of the problems associated with teachers and teaching. This article raises these issues and suggests that the developments that have occurred during recent decades in this area are opening up a domain for investigation that has the potential to spread to many other fields of societal and human activity, including industry and commerce, medical practice, and the whole of the fields of sociology and social psychological inquiry.

Advances in Quantitative Methods of Research

Research into the influences of teachers and the teaching processes employed in classrooms as well as the learning and development of students in those classrooms emerged as a field of considerable importance during the second half of the twentieth century. Advances came from the introduction of new ways of measuring learning outcomes, in particular, and sometimes the inputs involved, as well as new ways of analyzing the effects of factors on the variability in the measured outcomes between students within classrooms, between classroom groups within schools and between school groups. Interest in educational and psychological research in the

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching*, 103–120. © Springer Science+Business Media LLC 2009 first half of the twentieth century was, in the main, focused on differences between students at the individual level. With the emergence of sociology as a field of inquiry in institutions of higher education, attention was directed during the second half of the century towards the differences between schools, and the issues associated with social class and social justice, while the effects of teachers within schools and the major issues of teaching and learning within and between groups were, and still are, largely ignored.

Much of the research carried out into these issues in the area of educational sociology has tended to be qualitative, descriptive and ideologically driven (e.g., Ford & Foreman, 2006). However, the initial body of quantitative research has shown that most of the variance associated with educational achievement outcomes tended to exist between students within classrooms (70%), with ~20% between classrooms within schools, and only 10% between schools (Hattie, 1992; Keeves et al., 2005). These estimated proportions depend markedly upon the ways in which school systems are structured with different types of schools, and the ways in which classroom groups are formed through the streaming or tracking of students in classrooms with different levels of performance or different occupational and career interests.

It has become increasingly evident that the variability between classrooms that can be ascribed to differences between teachers, differences in the teaching processes that they employ, and differences in the characteristics of the student groups that are learning within the classrooms have not been submitted to the same analytical scrutiny that has been given to differences between students and differences between schools. Moreover, it is becoming apparent that in developing countries both in Sub-Saharan Africa and East Asia (Hungi, 2006) the estimated variance between classroom groups in some situations may be of a similar magnitude to that between students within classrooms. Consequently, differences between the teachers and the teaching practices they employ warrant more intensive investigation in educational research. Nevertheless, there are substantial problems involved, because teachers through their teacher unions are reluctant to expose themselves to any examination of their performance in an objective way, the results of which may be used to terminate their employment. This sensitive issue within the teaching service has restricted the undertaking of research using quantitative methods into factors that influence educational outcomes at the teacher and classroom level. Consequently, research continues to be focused on the student and school levels of analysis. The proposals for the use of financial reward systems for teachers based on the performance of the students they teach demands that more research urgently needs to be carried out into the characteristics of teachers and the teaching practices they employ that are effective in raising the levels of performance of the students being taught.

Appropriate analytical procedures are now available to investigate these effects in new ways that focus on the nature and effectiveness of the processes involved as well as the direct structural effects of teacher characteristics. Consequently, it is the purpose of this article to report and discuss the developments in quantitative methods that have occurred during the second half of the twentieth century and to argue that a turning point has now been reached in this field of inquiry that involves both teachers and teaching. Thus, the field is one where a considerable body of findings is likely to be reported over the coming decades that can be used to guide teacher education. This involves not only initial teacher education, but also in-service education associated with the learning of students at the different stages of life from early childhood to lifelong learning as well as the ways teachers work at different levels, in different disciplinary areas, in schools of different types and in different learning situations, including those methods arising from the use of information and communications technology, self-directed learning and problem- based learning.

A Historical Perspective

Initial work arose in the examination of teacher and school performance in a systematic way that moved beyond the assessment of student learning by school inspectors and the accompanying payment by results, from the development of standardized tests. It was recognized that the outcomes of education could be assessed by such tests and school superintendents could use the results of testing to evaluate the instructional program of a school (Munroe, DeVoss & Kelly, 1924). The use of standardized tests was employed in this way until the mid-1960s and continues in modified forms today in many countries. However, a landmark study was set up from 1933 to 1941 to investigate the changing nature of schools in the United States that sought to evaluate the work of the Progressive Education Movement. This research study was conducted under the directorship of Tyler (see Aikin, 1942). From this study, referred to as 'The Eight-Year Study', a new approach to the evaluation of the operation of schools emerged. Tyler (1949) wrote a seminal statement on the *Basic Principles of Curriculum and Instruction* that drew on this study.

Subsequently, Bloom and his colleagues prepared the *Taxonomy of Educational Objectives Handbook 1, Cognitive Domain* (Bloom, 1956), and *Handbook 2, Affective Domain* (Krathwohl, Bloom, & Masia, 1964), as well as the *Handbook of Formative and Summative Evaluation of Student Learning* (Bloom, Hastings, & Madaus, 1971). These works developed a framework that formalised the specification of educational goals and objectives as well as their assessment and the evaluation of student learning, from which the performance of students and schools could also be assessed and evaluated. However, the Eight-Year Study not only investigated achievement but also other outcomes of schooling, such as the students' attitudes and views of their learning environment. This subsequently led to seminal work by Pace and Stern (1958) on the use of descriptive scales to assess school and college climates and a sustained program of research by Fraser (1997) and his colleagues into the assessment of classroom environments and teaching processes.

A major development occurred in the mid-1960s and early 1970s that resulted from the establishment of the International Association for the Evaluation of Educational Achievement (IEA) under the leadership of Husén and Postlethwaite in order to conduct an ongoing program of cross-national studies in order to obtain a greater understanding of the forces that operated on students, teachers, schools and school systems across the developed, and subsequently the developing countries of the world. IEA was able to draw on leading scholars from around the world into the planning of its research activities. These scholars included Dahlöff (1967) from the University of Uppsala in Sweden, Walker from Scotland, Peaker from England, Carroll, from the Universities of Harvard and North Carolina in the United States, Thorndike and Wolf from Teachers College, Columbia University in New York, Bloom from the University of Chicago, together with his students, and Gage from Stanford University in California, as well as Plomp from The Netherlands. Initially, IEA was based at the UNESCO Institute of Education in Hamburg, but subsequently moved to the University of Stockholm in Sweden and then to Amsterdam in The Netherlands. With these international links IEA was able to draw on scholars who were skilled in quantitative research methods, such as Coleman and Kish from the United States, and Jöreskog and Wold from Sweden. With adequate financial support from the Ford and Spencer Foundations, the National Science Foundation in the United States and the Leverhulme Foundation in Europe a strong program of cross-national research was established.

The problems that confronted these scholars were to conceptualize the operation of education in systems across the world and to devise ways of resolving the problems of measurement and the analysis of data that would enable them to test models that were derived from theoretical perspectives of education systems seen in a global context. At a conference that was held by IEA at Lake Mohonk in the United States in 1967 for the planning of a study in six subject areas, a paper was given by Dahlöff (1967) that proposed a scheme for the educational processes that applied in crossnational settings and is shown diagrammatically in Fig. 1.

Of particular interest for planning and policy making are the frame variables. However, they depend on (a) the environment and the economy, (b) the demand for manpower, (c) the curriculum content, and (d) the objectives of education.

A powerful theoretical framework that tacitly integrated the many different views advanced by research scholars in the fields of Education, Psychology, Sociology, and Economics, with a cross-cultural and international perspective was subsequently developed. This functional process and organic model (Super, 1967) is presented in a slightly modified form in Fig. 2. It has rarely been adequately explored or tested, but the studies that have since been conducted by IEA have commonly drawn from the many ideas that are incorporated in this model.

This model is an Input-Process-Output-Utilization model of education that includes many significant components, namely (a) financial circumstances, (b) production conditions, (c) educational structures, operations and processes, (d) outputs



Fig. 1 A cross-national model of educational achievement in a national economy



Fig. 2 Input-process-output-utilization model

of knowledge, skills, attitudes, participation and level of attainment, and (e) utilization involving employment, community involvement and family activity. Causal influences, student movement through the system and financial flow are all taken into consideration and a longitudinal emphasis permeates the framework. However, it can be argued that it is necessary to include within this framework both (f) social and cultural capital, and (g) key aspects of national development, including human development.

The work of teachers and the tasks of teaching are closely linked to the Process stage of this framework, but it is necessary within a global and cross-national perspective to consider how the processes of teaching fit into the total framework. Meetings of the research scholars involved in planning subsequent IEA studies have sought to extend different parts of the model and have recognized that it was necessary to investigate a wide range of issues that influenced both teachers and the processes of teaching and learning. Studies into the effects of teachers and teaching that fail to consider the complexity of the setting in which education takes place are prone to the risk of misspecification of the factors that are producing either direct, mediating or moderating effects on learning and development.

The Impact of Psychology on Research into Teaching

During the latter years of the nineteenth century and the early years of the twentieth century the advances in experimental psychology in Germany led to the emergence of experimental pedagogy, and an interest in the scientific study of teaching in the United States, particularly at the University of Chicago and at Teachers College Columbia University in New York (De Landsheere, 1997). The period from 1900 to 1930 has been referred to as the "hey day of empiricism" by Cronbach and Suppes (1969) when educational research was directed towards the national management of teaching and instruction, psychological testing, the study of child development, and the specification of the laws of learning. This research involved the application of the concepts of psychology to the study of educational problems that were directed towards inquiry at the level of the individual. There was concern for experimentation, measurement, and administrative surveys, together with an emergence of quantitative research into educational problems. This led to widespread acceptance that psychology and the study of individuals formed the foundations of educational research. Such studies clearly had a place in the conduct of inquiry into the processes of education, but more was involved beyond the study of students at the individual level.

The basic quantitative procedures in the areas of measurement and the analysis of data from a psychological perspective that involves individuals have been well presented by Shavelson, Webb, and Burstein (1986) and Linn (1986) with regard to measurement and analysis respectively, and there is little need to re-present these procedures. They have their place in experimental and initial investigations into the problems associated with teachers and teaching. However, classrooms and schools are much more complex than can be examined through experimental or

quasi-experimental investigations, largely because classrooms and schools do not respond readily to the disruptions caused by experimental studies, and parents, children and teachers expect that the best possible conditions for learning are being employed at all times. Consequently, the major developments that have taken place during the past 20 years and that provide opportunities to investigate the work of teachers and teaching involve the idea of design-based research (Design-Based Research Collective, 2003) and intervention and monitoring studies (Postlethwaite, 2005). Super (1967) has provided the theoretical framework within which such studies can be conducted. This framework has several important features that warrant elaboration so that the changing nature of research into teachers and teaching that has emerged during the past 20 years can be better understood, with the recognition that the research procedures involved are still evolving. These features are considered in the sections that follow.

Evolving Features of Research into Teaching

Student flow and longitudinal research

Educational outcomes involve the learning and development of students. Super (1967) recognized this in the arrows that indicate 'pupil flow' in Fig. 2. The starting point in learning and development can not be identified effectively. Cross-sectional studies ignore change, because the starting level associated with an educational outcome is unknowable. Consequently, if change is to be assessed, a longitudinal study must be carried out. Traditionally in psychological research change has been assessed in terms of the difference between a pre-test score and a post-test score. However, in general, in educational research studies the difference between pre-test and post-test scores are not sufficiently reliable for the effects of factors influencing change to be adequately estimated after taking into account the low reliability of the difference score. Willett (1997) has argued for the use of a multiwave design with at least three time points so that an estimate can be made of the reliabilities of the intercept and slope of the regression line that models change, and allowance can be made for the unreliability of the data in the making of estimates of the effects of the factors that influence change. It must be noted, however, that the conditions under which teaching and learning occur also change over time. Consequently, the longitudinal aspects of studies into teachers and teaching involve not only change in the outcomes that relate to students but also change in the explanatory factors that are associated both with students and with teachers, teaching processes, classroom conditions, as well as with schools and their characteristics.

The Multilevel Nature of Educational Research

Educational research involves students, teachers, classrooms, schools and school systems, with students nested within classrooms, classrooms nested within schools, and schools nested within school systems. While the scholars who attended the Lake Mohonk Conference were not unaware of the problems of cluster sample designs and

the nested nature of educational processes, they were unable to handle the associated problems in meaningful analyses and Super's (1967) framework ignores this problem. While the analytical problem remained largely unresolved for the following two decades, an initial clarification of the issues involved in relation to educational processes was advanced in 1971.

From the Granna Workshop conducted by IEA in Sweden in 1971 a model of curriculum development was advanced that separated out clearly for the first time the operations of education into three levels (a) at the system level – the intended or planned curriculum, (b) at the classroom level – the implemented curriculum, and (c) at the student level – the achieved curriculum. This model, shown in Fig. 3, required not only that studies needed to be designed to take into consideration through both sampling and data collection these three levels of operation, but also that at the stage of data analysis, the procedures employed enabled effects at the three levels to be separated out in a meaningful way.

Many research workers argued about the problem and advanced the idea that the slopes of regression lines, together with the intercepts could be considered as outcomes at a higher level of analysis. Attempts were made to do this using least squares regression analysis (Larkin & Keeves, 1984) and Raudenbush and Bryk (1986) used a technique proposed by Mason, Wong and Entwisle (1983) that involved a maximum likelihood estimation procedure, and that also took into consideration the reliabilities of the estimates of the intercepts and slopes. The approach now referred to as hierarchical linear modelling (HLM) is widely used. Although alternative procedures have been advanced, that produce almost identical results, they do not have the flexibility and ease of use and conceptual understanding provided by the HLM programs in the investigation of cross-level interaction or moderating effects (Lee and Bryk, 1989).



Fig. 3 The context and components of the school curriculum (unpublished source, Granna Workshop, Sweden, 1971)

Moderation Effects and Cross-level Interactions

From the introduction of multilevel analysis procedures, the possibility emerged of examining the moderating effects of system, school, and classroom variables influencing different students with a particular characteristic in different ways. Moreover, different systems and schools can also have interaction effects on classrooms with different degrees of a particular characteristic. These effects are referred to as 'crosslevel moderation' or 'interaction' effects. The effects of greatest interest are those associated with teacher characteristics and different teaching processes on students with different characteristics, such as the gender based teaching effects on students who are males or females and the effects of experienced teachers in working with less able or handicapped students. The HLM programs are well designed to search for possibly significant cross-level interaction effects and for the graphical presentation of such moderation effects. An understanding of the operation of these interaction effects is something that educational research workers have not been previously able to consider until the methods of testing for and detecting significant effects had been developed. The study of teacher effectiveness in the past, has been confounded by the evidence reported from non-quantitative studies, that different students have widely different views of who are effective teachers. It is only through the examination of cross-level interaction effects that it has become possible to address this aspect both of teacher effectiveness and different teaching methods on different students. A further issue of considerable importance is the examination of different teacher characteristics and different teaching methods on the levels of student performance, including both achievement and attitudinal outcomes, at different stages of schooling

The use of different teaching methods at different stages of schooling, or by teachers with different characteristics can now be investigated through cross-level interaction effects using hierarchical linear modelling. This involves the estimation of growth scores across three or more grade levels for cohorts of students provided the estimates have an adequate degree of reliability for sound analysis,. However, the major problem associated with the design and conduct of studies that investigate both teacher characteristics and the methods employed by different teachers in relation to educational outcomes, is the willingness of teachers to be involved in such studies that require the measurement of the learning outcomes of the students whom they teach.

Mediating Effects of Student, Teacher, Classroom and School Variables

The framework advanced by Super (1967) presented in Fig. 2 considers a flow of analytical paths from left to right in the figure with implied causal relationships associated with each path as is common in path analysis. Not only does a variable have a direct effect on the outcomes examined in a study, but it also has indirect effects that are mediated by one or more variables lying causally in the paths between the variable under consideration and the outcome. At the time Super and his colleagues advanced this framework the analytical procedure of path analysis that had been proposed some years earlier in the biological sciences was under consideration in the

social sciences, but procedures for the use of this approach in the field of education had not been developed.

Simple procedures that involved least squares regression analysis were first employed in education by Peaker (1971), but generated widespread controversy particularly among scholars with a psychometric training who were committed to analysis of variance procedures. However, scholars with a background in econometrics accepted path analysis more readily as a meaningful way to examine the problem situations encountered in education, and to interpret the findings. Forty years on from the time the ideas of path analysis were first considered in the field of educational research, the uses of these procedures are still not generally accepted in the investigation of teachers and teaching.

Latent Variables and Suppressor Relationships

Within the framework advanced by Super (1967) there are clusters of factors and variables that are highly related both conceptually and empirically with substantial correlations between them. Initially a procedure was adopted of entering these variables into a regression equation in the analysis of data in blocks (Peaker, 1975; Pedhazur, 1982). Cooley and Lohnes (1976) originally referred to those estimates of effects where the regression coefficients were markedly enlarged and sometimes changed signs when further variables were added to a regression equation as 'bouncing betas' The effects involved became known as 'suppressor effects' and were sometimes meaningful, but more frequently appeared to be a consequence of correlated errors of measurement. The use of canonical analysis rather than multiple regression analysis, although both analytical procedures employed the principle of least squares as the basis of the analysis, served to introduce the idea of constructing a latent variable either in a formative or reflective mode (Hauser & Goldberger, 1971) in the manner indicated by the six circles in the framework developed by Super (1967) and shown in Fig. 2. The use of the reflective mode removed the problem of suppressor effects, but where the observed variables were not highly correlated it was more meaningful to employ the formative mode in the construction of a latent variable. Darmawan and Keeves (2006b) have recently discussed the problem of suppression and the introduction of latent variables in path analysis.

Structural Equation Modelling and Latent Variable Path Analysis

As a direct consequence of contact with IEA, that at the time had its offices in Sweden, two different procedures for path analysis were developed by Jöreskog and Sörbom (1979) and Wold (1982). Joreskög and Sörbom, referred to their analytical procedure as 'structural equation modelling' and employed maximum likelihood estimation procedures that could make allowance for both the unreliability of measured variables as well as the correlation of errors of measurement of observed variables. Wold (1982) developed a procedure referred to as 'latent variable path analysis' that used the principle of partial least squares in the analysis of path models with

structural equations that included provision for the formative mode in the construction of a latent variable and did not require the use of observed and latent variables that were normally distributed as was necessary for the use of maximum likelihood estimation procedures. Under circumstances where the variables were normally distributed these two approaches provided very similar estimations of the path coefficients. However, both approaches sometimes encountered situations in the analysis of data where invalid solutions were obtained that required reformulating the model. Structural equation modelling provided information about error terms and yielded a more rigorous testing of a hypothesized model, while partial least squares path analysis provided greater flexibility through the use of variables that did not satisfy the requirements of normality and multivariate normality, and the procedure was said to be more exploratory in nature.

Multilevel Latent Variable Modelling with Random Slopes

Research into teachers and teaching necessarily involves at least two levels of analysis, namely the classrooms and the students within the classrooms. The processes operating at the classroom level involve the teaching of groups and the learning that occurs within the classroom is concerned with the processes operating at both the between classrooms level and the between students within classroom level. Moreover, there are cross-level interaction effects in which classroom level effects moderate or interact with student level variables. Thus a new approach to the analysis of data is emerging referred to as 'multilevel latent variable modelling with random slopes' in which path models are constructed at both the classroom and student levels to model the mediating processes operating at each level, together with cross-level moderating effects that involve the interaction of classroom processes with student level variables, and that involve mixed level effects. The problem of separation of the variance at two levels was initially resolved through approximation by Muthén (1994) and led to a system of two level analysis through a program STREAMS developed by Gustafsson and Stahl (1996). A major advance was introduced into multivariate analysis by Muthén and Muthén (1998) through the development of a very powerful computer program, 'Mplus', that not only provided for multivariate analysis at two levels with the capacity to estimate causal path models at two levels together with cross-level interactions as well as the use of categorical variables under specific and multiple group modelling and growth modelling conditions. An example of the use of MPlus for multilevel latent variable modelling with random slopes in education has been presented by Darmawan and Keeves (2006a). The extended use of the this analytical procedure requires a powerful computer, with good initial estimates for the path coefficients under consideration. It is clear that this field of testing models of classroom and school effects is emerging to a stage where complex models that seek to examine the rich structure of the processes of teaching and learning are now under consideration. While the models involved are restricted to two levels, no longer is the process of teaching being seen as

limited to an isolated classroom that is under the control of a single teacher who is separated from colleagues and from students who all work and learn in similar ways.

Contextual and Ecological Effects in Teaching and Learning

An initial recognition of the importance of contextual effects arose from concern for the influence of the peer group both inside and outside the classroom on the teaching that took place within schools. It was evident that parents sought to purchase homes in districts where not only the school was highly regarded but also the students who were drawn to the school had kindred interests and came from similar home backgrounds. Keeves (1972) in a study of the educational environment and student achievement showed that in addition to the environments of the home and the school, the contextual effects of the peer group could not be ignored. This study averaged information obtained from three friends as indicators of the peer group effect. Bronfenbrenner (1979) subsequently advanced an ecological theory of human development that formalized the idea of contextual effects. While such effects had been recognized by E. L. Thorndike in 1917, Robinson (1950) had drawn attention to what he referred to as the 'ecological fallacy' and Stern (1970) had written on the person-environment congruence in education, both educators and sociologists largely ignored this problem.

The emergence of work on the multilevel analysis of data, particularly through hierarchical linear modelling has permitted the aggregation of data to the group level and provided for the estimation of both configural and contextual effects. Bryk and Raudenbush (1992) distinguished between a configural effect in which the aggregated variable operating at the group level had a significant regression relationship with an intercept that involved the outcome estimated at the group level, and a contextual effect in which the aggregated variable operating at the group level had a significant interaction or moderating effect on the slope associated with a regression relationship between an individual level variable and the outcome also operating at the individual level. The search for configural and contextual effects has become not only rewarding but simple to apply in multilevel analysis, particularly with hierarchical linear modelling, because it merely involves aggregating individual or student level variables to the group or classroom level and testing for hypothesized relationships in the regression analysis at the group level. The detection of significant configural and contextual effects in research studies involving schools and students has formed a major advance in the study of effective schools. This strategy replaces previous work that is based on estimates that suffer from aggregation bias for variables aggregated to the school level and both misestimated precision and some degree of bias for variables that are disaggregated from the school level to the individual student level. Where appropriate data are available, similar analyses of teacher and teaching effects at the classroom level are awaiting examination.

Classroom Climate Measures

Traditionally, structured observation schedules have been employed to examine the climate of the classroom and the teaching processes operating within classrooms. The most widely known schedule was the *Flanders' Interaction Analysis System* (Flanders, 1970) that involved recording classroom behaviour in ten categories, for example, asking questions, social organization, praising, and encouraging. Likewise, Medley and Mitzel (1963) also developed an *Observation Schedule and Record* (OScAR) system. Subsequently, the use of these instruments, which involved direct classroom observation was gradually replaced by videotaping and the post-coding of the taped record. While the direct observation of the classroom by an observer and video recording were both intrusive, the work of Stevenson and Stigler (1992) and the more recent IEA studies that involved video recording have made significant contributions to the study of teaching. The original work in this field suffered from an inability to undertake analysis using multilevel analysis procedures.

An alternative approach to the study of classroom environments emerged in the 1970s led by Welch and Walberg (1972) and Moos (1974) through the use of view or descriptive scales. Fraser (1997) has made a sustained effort to work in this field and has developed a wide range of scales for use at the classroom level within schools. This work has been strengthened by the development of multilevel analysis procedures, and the student's view of the teaching that they receive in the classroom can be highly informative and indicative of different methods of teaching and their effectiveness. It is perhaps surprising that while Pace and Stern (1958) initially studied college and university environments, so little work has been done in the investigation of teaching in university classrooms, with the notable exception of the study by Kek (2006) into the use of problem based learning in university tutorial classes in a medical course in a Malaysian university, that was analysed using hierarchical linear modelling and path analysis procedures.

The Study of Change

Teaching generates both learning and development, and both learning and development involve change. The analysis of change requires a relatively simple analytical procedure that initially models a growth trajectory and then employs regression equations that can model the factors that are related to the growth trajectory. While the simplest growth trajectory is linear, quadratic functions as well as logarithmic and Poisson transformations can readily be employed to model change. Consequently multilevel analysis procedures can be used in educational situations to model the growth trajectory at the lowest or micro-level, with the student at the second or mesolevel, and with the classroom at the third or macro-level. Furthermore, if the outcome is dichotomous or polytomous, the Bernoulli procedure can be employed, and if several outcomes are involved with dichotomous or polytomous response categories, a binomial function can be employed using the Rasch model to examine the changes that occur over time. Thus, time can be used as a predictor variable at the micro-level in order to assess whether change is both significant and consistent or reliable enough for meaningful explanatory analyses to be undertaken.

The conditions involved in teaching may remain constant over time or may change in a measurable way over time or simply involve a discontinuity associated with the administration of a treatment or intervention. Where teaching changes over time in a measurable way a predictor variable at the micro level is employed to model the effects of the changed teaching conditions. Alternatively, if a discontinuity is involved in the teaching conditions a simple dichotomous variable can provide for such a change in the regression model. Thus, the investigation of change in studies of teaching and learning require the rejection of the pre-test and post-test approach with classical analysis of variance procedures for the examination and analysis of the data. It is replaced by a multilevel analysis procedure that permits the initial modelling of change and the related and subsequent explanatory analysis using regression models to account for the observed change (Raudenbush & Bryk, 1989; Muthén & Muthén, 1998; Willett, 1989).

The Measurement of Change

The effective measurement of change where learning and development form the outcomes requires that not only must the scale of measurement be an interval scale, but the measuring instruments should also change over time to allow for the learning and development that has occurred. This requires the construction of appropriate instruments to assess student learning in response to teaching, as well as the equating of scores obtained from the use of those instruments to form an extended interval scale of measurement. Only with an interval scale that is not truncated at either the lower or upper ends of the scale can change in learning be measured effectively. Moreover, it is evident that with human learning there is no absolute zero, since there is no point in time where an individual can be said to have no knowledge or no skill. Furthermore, there is no upper limit to a scale, since there is no situation where an individual can have complete knowledge and a perfect level of skill.

Many have argued that in the field of education, measurement under these conditions is not possible. However, using three important principles it is possible to transform categorically scored data or crudely scaled data on to a consistent interval scale of measurement. First, the tasks of measurement and the performance of a person on these tasks must be considered to be probabilistic in nature. Second, it must be recognized that what is being measured is not the level of performance of an individual on a fixed scale, but the relative performance of the individual with respect to a series of tasks that differ in difficulty. Third, an index of the performance of the individual relative to the difficulty of the tasks can be transformed using a logarithmic transformation to obtain a probabilistic estimate of the individual's performance on an interval scale. The importance of the first principle would appear to have been recognized by Thurstone (1925). The second principle was first advanced by Lawley (1943). The third principle involving the use of the logarithmic transformation was first proposed by Rasch (1960). It was this third principle, and the recognition of the algebraic simplicity of the logarithmic transformation when compared to the use of the normal distribution function, that has made Rasch scaling a readily understood

and readily used procedure to convert test scores in education and psychology from an inadequate scale of assessment to a scale that has sound measurement properties. These properties permit the examination of change on an interval scale, which is independent of the items and tasks used in assessment and is independent of the persons employed to calibrate the scale, although the zero point of the scale is necessarily arbitrary.

It is the relative ease with which not only the outcomes of teaching can be measured on an interval scale, but also the predictor variables that involve the attitudes and views of students can be similarly measured, even though the measuring instrument may change over time. This approach has started to transform the study of teaching in educational research (Masters and Keeves, 1999; Alagumalai, Curtis and Hungi, 2004).

The Vision for Educational Research

This article is concerned with two of the key concepts of education at all levels, namely 'teachers' and 'teaching'. Since systematic research into educational problems first began to advance a little over 100 years ago and responded to the emergence of both measurement and statistical analysis as powerful tools in the conduct of inquiry into these problems, there have been few more central questions than: (a) what are the characteristics of a good teacher? and (b) what constitutes good teaching? There is little doubt that these questions have probably been asked frequently over the past 2000 and more years. It is perhaps self-evident to argue that the answers lie in what 'teachers know' and what 'they are able to do', since these merely relate to or restate the concepts of 'teachers' and 'teaching'. Whether answers are sought through quantitative or qualitative approaches, the basic questions remain today largely unanswered in spite of the immense amount of effort and the continuing debate that has gone on and is going into seeking answers to these two questions.

The past 40 years has seen remarkable developments in the use of procedures for collecting, storing and analyzing data as a consequence of the introduction of the electronic computer and the development of information and communications technology. The arguments advanced in this article emphasize that these two seemingly simple questions really involve an extremely complex set of issues that are concerned with the processes of education upon which both learning and human development depend once the genetic composition of each individual is taken as the unchangeable starting point for inquiry. Failure to employ reflective and logical thought that are the essence of qualitative research leads to asking the wrong subsidiary questions. Moreover, failure to employ the powerful tactics and strategies provided by the new technology leads to providing answers that lack simplicity and generality and cannot be subjected to refutation, and as a consequence, cannot be accepted as coherent knowledge. Nevertheless, Gustafsson (2007) argued that the understanding of causal influences on educational achievement through the analysis of within and between country differences using data from both two and three or more occasions was a highly complex task.

Immense bodies of data are already being collected that relate to the processes of education, much of which involves teachers and teaching. The monitoring of the outcomes of the process of education as well as the inputs to this process has become an

economic necessity as the numbers of people involved in the many different aspects of education and at the many different stages of life has increased in a remarkable way. Education is now seen as a recurring process throughout the lifetime of each individual person throughout the world. Systematic and rigorous analyses of the available data has much to give in answering the key questions raised above, particularly as further appropriate data are being collected during a monitoring process for three or more occasions in the lives of individual students.

Moreover, there has emerged during recent years the principle that controlled experimentation was not the only way of examining causal relationships. Psychological research that is strongly quantitative has during the past 100 years argued for the power of controlled experimentation. However, ongoing educational operations can rarely be modified or changed to satisfy the requirements of control and randomization for such experimentation. Consequently, a new approach has recently been proposed that has as its central purposes the investigation of the quality of teachers and the effectiveness of what they are doing. This is the field of design-based research (Design-Based Research Collective, 2003) that is built around several stages of operation, some of which largely involve reflection on observations and informed debate, and some of which largely involve the systematic analysis of data that relates inputs to outcomes through the examination of direct effects and the mediation and moderation of the effects of explanatory factors on the educational outcomes associated with individual learning and development.

Educational research is entering a new phase as new questions are being asked about the processes involved in teaching and learning, as well as the characteristics of the teachers and learners who are found to be successful during the different stages of life when opportunities to participate in education are provided. Research into educational problems has a key role in: (a) advancing human development, (b) increasing the quality of life of all six billion people living in our world, and (c) expanding the body of knowledge that helps us understand the meaning of life, because education is the core process that underlies these three great visions involving an endless quest. Central to the core processes of education are the teachers and the operation that they engage in of teaching. Research into teachers and teaching is urgently needed now that new procedures have become available for the more effective analysis of the data that is being collected through design based research, intervention and monitoring studies.

Biographical Notes

John P. Keeves is a Professorial Fellow in the School of Education at Flinders University. His research interests are wide and varied. From a very strong initial interest in Mathematics and Science Education, he has extended his field of inquiry in these areas from Australia to cross-national and comparative perspectives, and has as a consequence developed a strong interest in educational research methodology and measurement.

I Gusti Ngurah Darmawan is a Lecturer in the field of science and ICT education in the School of Education at the University of Adelaide. His research interests include science education, measurement, multivariate and multilevel data analysis, analysis of frequency and count data, sample design for educational survey research, and ICT in education.

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Section 2

BECOMING A TEACHER

TEACHER PREPARATION PROGRAMS

Kathryn M. Borman, Elaine Mueninghoff, Bridget A. Cotner, and Phyllis Bach Frederick

Introduction

The landscape of teacher preparation must address the enormous pressures that face today's teachers. In the United States currently, teachers are under intense scrutiny while addressing the changing needs of students who are both increasingly diverse and polarized with respect to their socioeconomic status. Moreover, teachers face stringent requirements for accountability under the rubric of No Child Left Behind (US Department of Education, 2007). Furthermore, teacher preparation leader Darling-Hammond suggests the call for a national policy to facilitate schools in addressing the intellectual needs of the twenty-first century (Darling-Hammond, 2007). Students need access to quality education and teachers to prepare them for their futures. Research indicates that a knowledgeable teacher is better equipped to facilitate student learning then teachers who have not been academically prepared (Olson, 2000). To address these complexities, colleges of education are attempting to adapt their traditional models of teacher education. In addition, new alternative routes to certification of teachers are being implemented throughout the nation (Bradley, 2007). These reform efforts have had varying degrees of success.

Teachers' formidable task is to prepare youth to take their places in a global society that continues to change dramatically. No one can accurately predict what US society will look like in coming decades; however, children in US schools today will be expected to take their places, accept leadership roles, populate the workforce, solve world problems and pass a useful legacy to coming generations of youth. According to a recent survey as many as two-thirds of Americans believe that if we fail to make appropriate reforms with the US education system, our ability to remain globally competitive will be compromised within the next decade. This is particularly true in the area of mathematics and science if the United States wants to maintain an edge in the global economy and be competitive with nations such as China, India and Japan. High school graduates must be better prepared for college and technical jobs in this ever changing modern economy (Peter D. Hart Research Associates Inc. and Winston Group, 2006). All this will happen in a complex, interconnected technological world that we can only imagine but for which we must assist in guiding the preparation

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching, 123–140.* © Springer Science+Business Media LLC 2009 of teachers (Shulman, 2006). Some educators and policymakers believe the teacher education programs currently in place do not adequately prepare participants to become effective educators (ECS Education Policy Issue Site, 2007). Pressures are enormous; teacher preparation must begin by reflecting on the expectations for the role of today's teacher (Seed, 2008).

History of Teacher Preparation in the United States

To focus on this crisis, we must look back to the evolution of teacher preparation in America. Schooling in America during the early days of our nation, evolved from religious, private institutions (Thattai, 2001). Initially, only for the elite, after the Revolutionary War, one room school houses dominated with one teacher teaching all subjects and levels. The Land Ordinance of 1785 and the Northwest Ordinance of 1787 set aside land for building and operating schools. With the expectations for teachers to now teach different subjects and levels, guidelines were developed for teacher training under these acts. Thomas Jefferson, in 1791, advocated for a public system of education, open to all, and free of religious constraints. This system continued to grow until the 1840s when Horace Mann and others advocated for the Common School Movement, providing free public education for elementary children.

Latin Grammar Schools evolved into the first American high schools under the influence of Benjamin Franklin during the eighteenth century. The value of public education was solidly ingrained in American society from an early date. Although minimal training for teachers was available in the beginning, preparation grew to include at least some college education. As the secondary movement progressed, teachers continued to be prepared in at least one subject matter content area. However, little thought was given to the pedagogical skills of teaching, per se. The beginnings of a concern about both professionalism and pedagogy occurred with the creation of the Normal Schools in the early 1800s. Normal Schools produced skilled classroom managers and disciplinarians. Here, students learned teaching skills in a formal manner leading to technical mastery of skills soon to be seen as traditional practices. Normal Schools provided the foundation for state supported schools that eventually became state teachers' colleges offering a traditional model for teaching (Shulman, 1998). By the 1950s these institutions served as the leading institutions for teacher preparation. Teachers' Colleges combined in the curriculum mastery over academic subject areas and a focus on the pedagogy of teaching (Sadker, Sadker, & Zittleman, 2008). This approach continued well into the 1980s when many of these schools emerged as colleges of education in universities, such as Montclair State in New Jersey, where a significant portion of undergraduate teacher preparation took place. The certification for entry into the field of education was awarded by the state in question when students completed Bachelor of Science degrees.

During the 1980s, major reports were issued calling into question both American education and the preparation of teachers within US colleges and universities, especially the former Normal schools. *A Nation at Risk* (National Commission on Excellence in Education, 1983) and *The Carnegie Report* (1980) sparked investigations into perceived problems in American education. Although much of the criticism was related to K-12,

higher education was not exempt from criticism. Teacher education was called into question, and this criticism continues until present day. A surge in alternative teacher certification programs over the past 25 years is linked to this perception of inadequacy in teacher preparation programs (Blake, 2008). Since the publication of *A Nation Prepared: Teachers for the twenty-first century* (Carnegie Forum on Education and the Economy, Task Force on Teaching as a Profession, 1986), the report of the Carnegie Forum on Education and the Economy, and *Tomorrow's Teachers: A report of the Holmes Group* (The Holmes Group, 1986), the focus has been on a significant restructuring of teacher education programs throughout the United States. Discussions stemming from these reports set the agenda for nearly all debates about teacher education in this country (Fraser, 1992). In response, major educational reforms followed.

In order for teachers to be prepared in this new wave of education reform, ~100 of the nation's research universities joined the Holmes Group, which began a critical analysis of teacher education in 1983. Committed to the goals of reform of teacher education and of the teaching profession itself, the Holmes Group outlined a specific plan for the reform of schools, the profession, and teacher education. *Tomorrow's Teachers* (The Holmes Group, 1986) emphasized the importance of well prepared teachers and reformation of our nation's schools. Their stated goals included:

- 1. To make the education of teachers intellectually more solid.
- 2. To recognize differences in teacher's knowledge, skill, commitment in their education, certification, and work.
- 3. To create standards of entry to the profession that are professionally relevant and intellectually defensible.
- 4. To connect our [colleges or universities] to K-12 schools.
- 5. To make schools better places for teachers to work and learn (The Holmes Group, 1986, p. 4).

The Holmes group stressed the need for a greater focus on academic content and pedagogy in teacher preparation; and added a fifth year of professional education studies and a 1-year internship before licensure.

A Nation at Risk (National Commission on Excellence in Education, 1983) criticized the American school system, but the Holmes and Carnegie reports targeted specific changes in at least some parts of the systems for preparing teachers. Fraser (1992, p. 12) argued that there are four specific elements refining a newer approach to teacher education:

- 1. The replacement of the education major with an arts and science major;
- 2. The recruitment and retention of people of color in the teaching profession;
- 3. The empowerment of teachers; and
- 4. The expectation of a clinical experience much more substantive than current student teaching.

This approach initiated the foundation for broader, more progressive reforms.

Following the reforms of the 1980s states began to make changes particularly to their certification laws as most teacher education programs reflected the traditional status quo. Despite the attention and recommendations calling for strengthening the teaching profession by raising standards for teacher preparation, entry and professional

development, teachers were still being drawn from the bottom ranks of college graduates, and pupil performance had not improved (Smith, 2008). Teachers with poor academic skills have been entering the workforce in larger numbers than teachers with stronger academic skills (Ponticell, 2007). To prepare teachers academically, the emphasis necessarily was on content and subject matter as the basis for the curriculum to the exclusion of pedagogy. This focus laid the foundation for No Child Left Behind Act in 2001 and alternative methods for teachers to acquire their certification.

In 2001 the US government passed a piece of legislation entitled the No Child Left Behind legislation (NCLB) that provided the Federal Government with a mandate for educational reform of unprecedented magnitude. Initially, when the Elementary and Secondary Education Act was to be reauthorized in 2001, the Bush Administration pushed through an education reform plan entitled No Child Left Behind with high emphasis on accountability and sanctions. There had been little public discussion and minimal research knowledge about the contents of the legislation and if specific strategies mandated by the legislation would have the desired impact (Lewis, 2007). For US school teachers, NCLB became a high stakes accountability measure aimed at improving the performance of all students and increasing the number of highly qualified teachers in America's schools (Smith, 2008).

Because of licensure requirements implemented by the states and directly related to NCLB, teacher quality is affected. According to Smith, there are two key objectives:

The first is to ensure that every teacher is highly qualified in the subjects they teach and the second is to reduce the barriers to becoming a teacher by 'retooling' traditional teacher education programmes and opening up alternative routes into the profession. (Smith, 2008, p. 611)

NCLB legislation states that a teacher must be "highly qualified" in the subject areas he/she teaches. According to law, highly qualified refers to full state certification. Alternatively, a teacher may be highly qualified if he or she has passed the State teacher licensing examination, and holds a license to teach. This means that the teaching candidate must possess at least a bachelor's degree and be able to pass state academic tests or must successfully complete an academic major or coursework equivalent to a graduate degree to take on a teaching position at the Pre-K through Grade 12 levels (US Department of Education, 2004).

Historically, poor students and students of color have been taught by inexperienced and underqualified teachers. NCLB addressed this disparity with new approaches to assuring teacher quality. Although under NCLB, the federal mandate that there is a "highly qualified teacher" for every child in every core academic class, observers have pointed out shortcomings (Berry, Darling-Hammond, Hirsch, Robinson, & Wise, 2006). Colleges of Education and the federal government under NCLB differ greatly in their definitions of "highly qualified." Colleges of Education continue to favor programs valuing subject matter content balanced with strong pedagogical knowledge, whereby, the federal government tends to see little value in pedagogy and has emphasized teacher quality as commensurate with content knowledge (Kysilka, 2003).

The discussion around NCLB reflects in large part the controversy of academic testing as opposed to the value of skilled pedagogy in the classroom. NCLB focuses almost exclusively on subject matter knowledge. In the majority of Colleges of Education, teacher candidates are currently expected to take a significant amount of content courses in the subject areas they will teach. These courses, it is argued, allow future teachers to understand how knowledge is constructed in different disciplines (Fraser, 1992). Teachers can teach at various levels only when they can construct and deconstruct knowledge in their own specific areas of teaching.

Another way states have complied with NCLB has been the creation of academic testing for subject area mastery. One example is Praxis Testing I, II, III designed through Educational Testing Services and used by some states. The Praxis Series assessments provide educational tests and other services that states use as part of their teaching licensing certification process. Praxis I tests measure basic academic skills. Praxis II tests measure general and subject-specific knowledge and teaching skills. Praxis III assess the skills of beginning teachers in classroom settings by direct observation of classroom practice, review of documentation prepared by the teacher and semi-structured interviews (Educational Testing Service, ETS, 2001). According to NCLB guidelines, states may interpret and establish their own standards, thus designing their own academic testing for mastery of subject areas.

NCLB recognizes the importance of subject matter competency by requiring teachers to major in the field and passing tests in the subjects they teach. Berry et al. (2006) argue that often teachers are labeled unqualified but really are knowledgeable and accomplished especially those who teach multiple subjects. Many middle school teachers, rural teachers, and teachers in reform based high schools teach in interdisciplinary teams. Science teachers teach biology, chemistry, physics and earth sciences and do not hold majors in all areas. Since guidelines for the "highly qualified" criterion were nebulous at best in addition to differing widely for elementary, secondary, new teachers, veterans and special education teachers, adherence to the law has been difficult (Galley, 2003).

Because NCLB directly affects the curriculum in public education, it indirectly was also responsible for what would be taught in the teacher education programs (Kysilka, 2003). The program entitled "Teachers for a New Era," funded by the Carnegie Corporation of New York was created to transform teacher education programs. This program's goal was to strengthen K-12 teaching. Selected colleges and universities have had flexibility to create these new induction models. Key to these reforms is the involvement of both College of Education faculty and Arts and Sciences faculty in a redesign of the teacher preparation program (Charner, 2004). "Teachers for a New Era" is focused on three principles (Carnegie Corporation of New York, 2007, pp. 3–5):

- Leadership on the part of the presidents of supported institutions that elevates the role and importance of schools of education within the university community and a design that builds on research evidence;
- Top-level collaboration between university faculty in the arts and sciences with the school of education faculty to ensure that prospective teachers are well grounded in specific disciplines and provided a liberal arts education; and

3. Establishment of teaching as a clinical profession, with master teachers mentoring students in a formal two-year residency as they make the transition from college to classroom.

Teachers from the K-12 schools are master teachers who have the responsibility of supervising teacher interns. There must also be residencies for beginning teachers during a 2-year period of induction. Alternative approaches in teacher preparation have proliferated in recent years. The next section discusses these approaches.

What Are the Implications of Variations in Teacher Preparation?

Colleges of Education have had mixed results with the implementation of differing strategies and methodologies in response to NCLB. This uncertainty in traditional teacher preparation coupled with a shortage of teachers prepared to teach in particular areas such as mathematics and the sciences has led Colleges of Education to alternative responses in the training of teachers.

Following the National Council for the Accreditation of Teacher Education's (NCATE) revisions in 1988, 1993 and 1998, the curriculum offered in many Colleges of Education was intensified to reflect the standards-based reform movement. This was demonstrated in the Council's decision in 1995 to adopt a number of approaches in order to create new, more rigorous standards. The Council adopted the stance that each student must undertake at the graduate level a coherent program of studies, acquire a firm foundation in the liberal arts and teaching disciplines, and take up programs that prepare teachers to teach to the new and more demanding content standards set for students (Promising Practices, 1998). As might be assumed, the implementation of these changes was hardly consistent throughout all university-based teacher education programs.

Simultaneously in the mid 1980s, alternative teaching programs were being developed to meet the need for teachers in difficult-to-recruit content areas such as mathematics and science, and in special education career paths. These programs have grown exponentially in the last 20 years. In 1983 only eight states reported having alternative education pathways with fewer than 200 students being certified. In 2005, the National Center for Alternative Certification reported over 59,000 teachers receiving certification via alternative pathways representing 30% of our new teachers (National Center for Education Information, 2005). Such programs typically recruit individuals with previously earned 4-year degrees and work experience in related careers and "fast track" them in obtaining certification. These programs vary in structure, methodology employed and outcomes. For example, the program might be structured as a 6–8-week summer program or as a 2-year program with intensive mentoring.

Candidates enrolled in alternative preparation programs have many of the same experiences that characterize traditional programs but do so in a much shorter time frame. Alternatively, teachers may enroll in coursework linked to certification requirements after they begin their teaching careers. For example, teachers in the sciences and mathematics are frequently hired in this fashion. Candidates in these circumstances are frequently linked with highly skilled and experienced teachers who serve as role models and mentors. Teacher candidates in alternative programs lucky enough to have such placements can learn teaching strategies from their mentors and can go on to be highly successful. Others, less fortunate, never find an appropriate role model and the exposure to "professionalism," a complex process that integrates the knowledge and abilities of the teacher candidate with passion, energy and commitment to take on the role and be successful in the classroom Such modeling is passed on from teacher to student teacher through close interpersonal relations (Patterson & Purkey, 1993).

The Georgia Teacher Alternative Preparation Program (TAPP) is a widely cited example of a well constructed alternative program. This program provides a teacher preparation option targeting individuals who have the basic qualifications to teach early childhood, middle-grades, secondary or Pre-K-12 education but has not completed a teacher preparation program (Georgia Teacher Alternative Preparation Program, 2001). In order to be considered for the Georgia TAPP program, applicants must have a Bachelor's degree in the field of certification or a closely related field, a 2.5 GPA, a passing score on PRAXIS I and clearance in the state of Georgia's criminal background check (US Department of Education, 2004). Once accepted, the student applies for Intern Certification and is assigned to a Candidate Support Team. This 2 year research-based program is organized as two phases. During the first phase of the program, students enroll in a summer program that provides an "Essentials" course. This course introduces students to best practices and provides information about professional roles and responsibilities inherent in the educators' code of ethics; the fundamentals of parent communication; and familiarity with special education requirements. During the second phase of the program candidates teach in the classroom and are supported by intensive monitoring and supervision as well as monthly seminars. In the first year alone the student receives 100h of school based mentoring followed by an additional 50 h in the second year (US Department of Education, 2004). This is one example of a state's response to alternative education routes.

What Are Essential Components to Teacher Preparation Programs?

Teacher candidates who have mastered the subject matter either through coursework taken in Colleges of Education or by alternative routes must also develop the skills necessary to effectively teach their subject. An effective teacher needs to apply theoretical concepts to the classroom in order to engage the student in the learning process. Effective teachers strive to grow professionally and use their knowledge to positively affect classroom practice (Barker, Kagan, Klemp, Roderick, & Takenaga, 1997). Each Teacher will be able to establish his/her own individual style after interacting in real teaching situations.

The process of teaching and learning is informed by educational theories presented to teaching candidates in a variety of formats. In Colleges of Education, theories of teaching and learning are typically included in the core foundations and methodology classes. These same approaches can be presented in alternative ways through workshops, seminars and modeling if time is limited. Because the field of teacher preparation is faced with increasing student diversity across gender, ethnicity, race and economic backgrounds, future teachers will continue to face diversity in their classrooms. Language and cultural issues accompany the globalization of the workforce. As immigrant, poor and non-English speaking populations increase, the expectation that teachers use the same teaching methodologies and high-stakes testing to promote uniform outcomes for all students under requirements of No Child Left Behind may be inappropriate.

Yet another aspect to be addressed in teacher preparation is the issue of professionalism. Professionalism requires that teacher candidates integrate knowledge and skills with professional values, passion, and their own unique personality. Danielson (2007) describes professionalism as an essential component of professional responsibility. Professionalism enables teachers to serves students and their needs first by acting as an advocate on their behalf and seeking opportunities to be a decision-maker in terms of the highest professional standards for students. Teacher preparation programs that offer a student-centered approach where the focus is on the teaching candidate will be successful. Those programs that offer the most opportunities for teacher candidates to model from others and have hands-on experiences seem quite effective. Teacher candidates can best become professional teachers in an atmosphere where they can interact with other teachers in direct ways about what is going on in specific classrooms (Barker et al., 1997). Successful integration of skills, abilities and personality will result in the teacher candidate becoming a master of student engagement. The ability to connect with students greatly contributes to effective teaching. The power to engage students comes in many forms. Some students are already excited about the subject and are eager to learn more. More often the teacher must actively engage or motivate the students by promoting a sense of the importance and relevance of the topic and the related learning process. The successful teacher manages to get students focused on the subject; only then is learning possible.

When teacher candidates begin their pre-service educational careers by going into the field to examine the practical aspects of teaching, they can also develop a relationship with mentors (Anhorn, 2008; Darling-Hammond, 1998). These hand chosen, master teachers model appropriate classroom behaviors. Teacher candidates begin to pick and choose teaching strategies and techniques they observe from their mentors and from which they create their own style. Their methods and strategies must fit their own perspectives and personalities. Because teachers serving as mentors have different styles, it is important for teacher candidates to see a variety of classrooms and a variety of teaching styles. Each teacher candidate has certain innate abilities, and, depending upon which techniques he/she chooses, his/her own level of teaching effectiveness will vary. It is exceedingly important for teacher candidates to have outreach experiences in local schools and observe teacher practices in professional settings. Preservice teachers place a high value on field experiences. Teacher preparation programs need earlier and more realistic field experiences (Anhorn, 2008). At Fordham's University Graduate School of Education, Initial Teacher Education, Elementary Program, faculty members in teacher education develop strong relationships with Pre-K-12 school partners. These types of partnerships enhance the quality of the field experiences for teacher candidates. Adherence to high quality measures, put Fordham in the winner's circle for the National Awards Program for Effective Teacher Preparation established by the US Department of Education (Dean, Lauer, & Urguhart, 2005). The Fordham application of learning theories to classroom practices can evolve into professional development in-service workshops for first year teachers as they enter the field (Anhorn, 2008). The teacher candidate culminates his or her own experience by making explicit his or her mastery of knowledge in a particular subject matter area, the theoretical principles that enhance this mastery and the pedagogical skills that hold practice and subject matter mastery together. Finally the teacher candidate integrates all of this and becomes a new model for teaching. This new passion includes energy, enthusiasm, excitement as well as respect and caring. This professionalism resulting from the culmination of many activities must be nurtured throughout the teachers' professional careers. They will be subjected to many accountability issues through assessment techniques.

Summary of Key Attributes of Traditional College of Education Programs and Alternative Programs

Traditional Pathways

- Subject matter knowledge other than general education requirements typically taught within college of education for K-8. Knowledge is general, broad based versus in depth.
- Pedagogy and methodology taught in a structured, integrated manner and time frame within the College of Education.
- Experiential Learning commences with dependent, structured activities such as observation, guided tutoring and culminates with largely independent student teaching in preparation to enter the profession.

Alternative Pathways

- Subject matter knowledge based upon courses, degrees outside College of Education supplemented by the college of education.
- Pedagogy and methodology is largely taught in isolation and within a compressed time frame acknowledging the degree attainment/experience of the teacher candidate.
- Experiential Learning is progressive but within a compressed time frame affording little time for assimilation, and assuming past experiences, will suffice for minimal progressive application opportunities.

Three Components Essential for Teacher Preparation for Traditional and Alternative Methods

Regardless of what type of program the teacher candidate accesses in order to be adequately prepared for the profession of teaching, the literature concurs that there are three essential components that must be integrated into the curriculum. These components include subject matter, pedagogy/methodology and experiential learning. The following is a discussion of the components as they relate to traditional and alternative education programs.

Subject Matter – Within College of Education Programs

Teacher candidates typically take a broad base of general education courses, courses related to their field (teaching electives), and liberal arts electives. Such subject matter typically lies within the domain of core competencies of faculty in the Colleges of Arts and Sciences. Depth and breadth of knowledge varies with the design of such academic programs. The question of rigor is brought up. How rigorous should these programs be for education majors? Many believe that the faculty within Arts and Sciences Colleges need to work more closely with education majors. In fact, recent reports call for stronger collaboration between faculty at schools of education and departments of arts of sciences (Fraser, 1992). Leading advocates call for Arts and Sciences faculty to be directly involved with the supervision of teacher candidates in the field. Such integration should lead to better mastery of appropriate content necessary for teachers dealing with the higher content standards set for students (Fraser, 1992). Measurement of subject matter knowledge can make a difference also. More authentic measures rather than teacher performance on tests may capture the influence of subject knowledge on student learning. The pairing of certain subject courses from Colleges of Arts and Sciences with education courses may lead to higher student achievement (Darling-Hammond, Chung, & Frelow, 2002).

It appears that a tightened, well integrated approach would be an advantage for teacher educators. Darling-Hammond (1998, p. 7) states, "teachers need to understand subject matter deeply and flexibly, so that they can help students create useful cognitive maps, relate ideas to one another and address misconceptions." Teachers rely on this knowledge background so they can connect ideas to their students from the disciplines they are teaching on a daily basis. In order to do this effectively in their teaching, teachers develop pedagogical content knowledge along with mastery of subject matter. Learning to teach must be vivid in discipline-specific perspectives. (Shulman & Sherin, 2004)

Subject Matter – Alternative Routes Versus Teachers' Colleges

Teacher candidates come with bachelor's degree programs with majors in appropriate fields of study. Most alternative programs require a specific minimum GPA, such as the Georgia TAPP program that requires a 2.5 GPA. (Georgia Teacher Alternative

Preparation Program, 2001). Many candidates are graduates of prestigious universities who have studied an area/discipline in great depth. These candidates bring to the Alternative Programs transcripts documenting academic content. This mastery of content and levels of depth and breadth are of varying intensities. Teacher candidates entering alternative routes bring with them competencies in general education, liberal education and liberal arts according to the type of program they majored in for their baccalaureate degree.

Pedagogy/Methodology – Education Classes taught in College of Education

Teacher candidates follow a schedule of courses taken within a structured framework usually following a prescribed sequencing. Teachers need to know about how students learn. They have to incorporate an array of various teaching strategies to accomplish certain goals. They must incorporate different techniques for assessing student learning (Darling-Hammond, 1998). Teacher education programs provide coursework in these foundations/ methodology areas leading to an academic degree. In some programs they are integrated with field experiences from the first introductory courses offered immediately in the freshman year. Other programs, usually the traditional 4-year College of Education program, offer these pedagogical courses later in the program culminating in practice teaching at the senior year.

Pedagogy/Methodology – Alternative Routes

Teacher candidates generally receive a short initial preparation in the summer where a compressed program highlighting pedagogy and methodology is introduced. Then various follow-up seminars, workshops, practicum activities are held throughout the on-going 1–2-year internships (US Department of Education, 2004).

Often the participants are hired into a district after the short-term summer program and enroll in collateral coursework at the university where they study required methodology courses (ECS Educational Policy Site: Teaching Quality, 2007). Such on the job training replaces the more traditional pre-service training. Programs such as "Teach for America" offer a structured apprenticeship through which teachers can attain their teaching skills in methodology/pedagogy upon entry to the profession as part of their job (Sadker, Sadker, & Zittleman, 2008). When alternative route candidates pass the same culminating exam and meet the same requirements for licensure/ certification as traditionally prepared teachers, one can argue that both routes lead to accreditation (ECS Educational Policy Site: Teaching Quality, 2007).

Experiential Learning - Colleges of Education

Teacher candidates have extensive field/experiential learning as part of the structure of the Teacher Education program. Strong hands-on classroom experience throughout the program will prepare teacher candidates for the realities of the classroom. This can be accomplished through powerful partnerships between university and K-12 faculties (ECS Educational Policy Site: Teaching Quality, 2007). Other partnerships

are provided grants for involvement between teacher preparation institutions and local school districts in high need areas. These grants are offered as an outcome of the higher Education amendments of 1998 in response to the nation's critical need for high quality teachers. Reauthorization of Higher Education Act (1998, p. 1) funded activities that included:

- Implementing reforms that hold teacher education programs accountable.
- Improving prospective teachers' knowledge of academic content.
- Ensuring that teachers are well-prepared for the realities of the classroom.
- Preparing prospective teachers to use technology.
- · Preparing prospective teachers to work effectively with diverse students

During the years following these 1980s reports, many solutions were proposed, including discontinuation. New programs responded to the demands of the National Council for the Accreditation of Teacher Education (NCATE) to bring about performance based standards. The emphasis was on rigor (Promising Practices, 1998).

Teachers for a New Era encourage close relationships with the practicing schools when university instructors supervise teacher candidates in the clinical setting of the school classroom. Experienced excellent teachers in the school classrooms are recognized as critical faculty in the higher education setting. Professionalism must be introduced immediately in all aspects of curriculum in Colleges of Education. According to Darling-Hammond (1998) "Teachers learn best by studying, doing and reflecting; by collaborating with other teachers; by looking closely at students and their work; and by sharing what they see" (p. 2). Teacher candidates cannot stay in their college classrooms and learn how to implement pedagogy and develop decision making skills. They must develop out in the school classrooms (Darling-Hammond, 1998).

In some Colleges of Education the majority of these experiences culminate the teacher candidate's career. However, more and more these experiences are integrated throughout the entire collegial experience. Partnerships have become increasingly the way to better prepare teacher candidates. As a result of these partnerships, professional development schools have been created where theory meets practice. Senior teachers in the field serve as mentors. Teacher candidates are organized in teams with experienced teachers and college faculty.

Experiential Learning – Alternative Education

Teacher candidates usually are placed immediately in the classroom with supervision in the way of induction and mentoring (ECS Educational Policy Site: Teaching Quality, 2007). Obviously, the time frame is compressed for learning since teacher candidates begin immediately. However, with proper mentoring and role models, beginning teachers are able to choose pedagogies and teaching strategies that work for them. During this induction period, faculty both from Colleges of Education and Colleges of Arts and Sciences work with the teacher candidate on a regular basis, arrange for observations and provide guidance to improve instruction. Darling-Hammond (1998, p. 4) suggests the following: "mentoring for beginners and veterans; peer observation and coaching; local study groups and networks for specific subject matter areas; teacher academies that provide ongoing seminars and courses of study tied to practice; and school-university partnerships that sponsor collaborative research, interschool visitations, and learning opportunities developed in response to teachers' and principals' felt needs." Once the teacher candidate completes a formally structured induction program, he/she will receive a final document acknowledging full completion of the program and then true recognition as a "professional."

The Current Debate on Colleges of Education Versus Alternative Routes

The ultimate gatekeepers for teacher candidates are the education professors. Clearly immense variation exists not only in types of teacher education programs but in styles of the teaching professoriate. Lee Shulman (2005) has led research at the Carnegie Corporation and compared preparation programs for teachers with the education of other professionals; i.e.: physicians, lawyers, nurses. Shulman (2005, p. 7) makes the following provocative statement regarding teacher education:

Teacher education does not exist in the United States. There is so much variation among all programs in visions of good teaching, standards for admission, rigor of subject matter preparation, what is taught and what is learned, character of supervised clinical experience, and quality of evaluation that compared to any other academic profession, the sense of chaos in inescapable. The claim that there are "traditional programs" that can be contrasted with "alternative routes" is a myth. Compared to other professions, teacher preparation consists of many divergent pathways.

All of these points must come together as "pedagogical convergence" that becomes pervasive and persistent within a professional community. Shulman (2005) asks teacher educators to become "intentional" about developing these "signature" pedagogies.

Both traditional routes for teacher preparation as well as less traditional, alternative routes have shortcomings. Colleges of Education have been subjected to strong criticism as chronicled by the Teacher Quality and Leadership Institute:

- Too many students drop out or fail to enter teaching.
- Too many graduates are poorly equipped to teach.
- Programs focus too much on "soft" pedagogical knowledge at the expense of subject-matter depth.
- Programs fail to prepare graduates to teach to student performance standards.
- Programs do not provide adequate real-world, practical experience.
- Programs aren't sufficiently responsive to the needs of nontraditional teacher candidates, especially minorities and mid-career adults (http://www.teaching-quality.org).

Shulman (2005) points out that Colleges of Education now have an increasing numbers of adjunct faculty who have commitments elsewhere. In a time when there should be convergence among education faculty in building a small set of signature pedagogies, having a diverse, unfocused faculty is problematic. Even though colleges and universities have begun to address the problems which include "revised, challenging standards for accreditation of teacher education; the growth of professional development schools; and emphasis on a deeper knowledge base for prospective teachers as a demonstration of competence"; however, this is only the beginning (Promising Practices, 1998, p. 1). In addition, significant, growing problems beset the first service placement for new teachers. Darling-Hammond (1998, p. 4) notes:

Most U.S. teachers start their careers in disadvantaged schools where turnover is highest, are assigned the most educationally needy students whom no one else wants to teach, are given the most demanding teaching loads with the greatest number of extra duties, and receive few curriculum materials and no mentoring. After this hazing, many leave.

Alternative programs also have been criticized. Darling-Hammond suggests that the effectiveness of such alternative programs as Teach for America (TFA) is compromised. The program takes graduates from liberal arts colleges and places them in highly disadvantaged and isolated school districts. They are welcomed because of the growing demand for teachers in these "poor" districts. However, attrition is very high, with many of these new teachers leaving the profession permanently based upon their negative experiences. These new teachers are often poorly prepared and placed in the most challenging situations, seemingly set up for failure (ECS Educational Policy Site: Teaching Quality, 2007, p. 3). The debate is not over which path is best in teacher preparation, but rather how to successfully integrate and measure the essential knowledge, skills and professionalism needed for effective teaching.

Some would argue that although subject matter and teaching methods are both addressed in the college setting and in the field, K-12 classrooms are also exceedingly important in teacher preparation, still another essential component is missing. Patterson and Purkey (1993, p. 4) argue that teacher educators must "focus on attitudinal relationships in the preparation of teachers." They refer to Carl Rogers and his belief that certain attitudinal relationships facilitate learning (Rogers, 1969). Changes in teacher education programs have continued to focus on academic content and instructional methods. Patterson and Purkey (1993) point out that none of the major reports of the 1980s including the 1983 A Nation at Risk report released by the National Commission on Excellence in Education (1983) addressed teacher personality, characteristics and personal beliefs and values. It would be easy to conclude that they are of little significance when compared to academic content or instructional methods.

In preparing today's teacher candidates for tomorrow's future, we must think beyond the traditional modes of teacher preparation often tied to the Normal Schools of the past. Teachers of teacher candidates vary greatly in what they offer in programs. Faculty within Colleges of Education have varying styles and levels of experiences and knowledge of pedagogy across a multi-layered disciplinary base. Coupled with liberal arts, professors in discipline specific areas, along with their colleagues in education seek to incorporate educational principles and theory. The teacher education reform initiative entitled "Teachers for a New Era" (TNE) underscores the need for faculty in the arts and sciences to play a significant role in the education of teacher candidates in their mastery of subject matter as well as liberal arts and liberal education (Charner, 2004, pp. 1–2).

Shulman (1998) looks to Dewey and the idea of a "laboratory" setting that is "consistent with the preferred orientation of the research university and its commitment to skepticism, scientific experimentation, invention, discovery and progress." Shulman, like Dewey, looks to other professions for inspiration to "converge on a small set of 'signature pedagogies' that characterize all teacher education" (Shulman, 2005, p. 7). While content knowledge and pedagogy form a significant knowledge base for the "profession of teaching" the final phase is all about that professional practice. In all professional fields, students culminate in medical residencies or architects' apprenticeships. In education it has been a supervised clinical experience such as student teaching. They can be practicum experiences of some sort supervised by the traditional university-based educator or in some other way tied back to the theoretical base. Practice meets theory. The field experiential component is vital in fulfilling the threefold approach to teacher preparation. Shulman (1998, p. 521) believes that these individual experiences are part of the community of practice "whereby standards of practice evolves." Shulman (1998, p. 521) conclude that the qualities of every good teacher include "empathic understanding, respect and genuineness reflective of self-actualizing behavior." Teacher preparation must move beyond subject matter and pedagogy. It must go beyond cognitive learning and foster interpersonal relationships facilitating student affective learning.

Both Colleges of Education and alternative routes in teacher education are equally challenged to provide teacher candidates the kind of experiences they will need to develop into an effective professional teacher. This dimension is the key to the teaching/learning concept. It is the response to finding each teacher's individual style within the "teaching arts." It represents each teacher's unique response to the separate challenges in meeting the individual needs of the students. Teacher candidates can only develop this professionalism in a student-centered environment where their needs are first validated and then later they model the same environment for their own students. It is to be noted that with any program traditional or alternative, the professionalism component needs to be intentionally integrated throughout the fabric of the curriculum and especially in the experiential learning component.

Proposed Framework for Teacher Education/Preparation

Regardless of the setting for teacher preparation programs the following proposed framework provides a template that could be incorporated into all professional teacher education programs. The desired outcome would be programs, regardless of type, providing consistency of outcomes in the education of our teaching professionals and provide a structured environment where teacher candidates can find the support to develop their own unique teaching philosophies and the creative solutions to their implementation. Strategies include:
- Model student-centered programs with opportunities built in the program to test unique responses to real everyday challenges in the classroom.
- Create opportunities for teacher candidates to examine their own values and then select methodologies and ways to validate them in the classroom.
- Provide models of positive teacher engagement and accompanying successful learning experiences.
- Incorporate theories of assessment and accountability thus encouraging the teacher candidates to self-reflect on classroom strategies and make the necessary adjustments and changes.
- Attend to diversity and cultural differences as well as globalization issues.

The question then becomes where teachers can go to receive content knowledge and related teaching skills in an environment supporting the acquisition of what we could term professionalism. Are colleges of education the appropriate and or only logical solution? Will they be able to be overhauled to meet these challenges which include diversity, globalization, technology, cultural expectations, work force needs and language barriers? Will the answer lie only in alternatives to teacher preparation? Will teacher preparation take a whole new focus to meet the every changing complexities of society today and in the future? The answer to the future lies in identifying the needs of learner and developing a cadre of responses from which the teacher candidate can use to develop his/her own unique effective teaching style.

Biographical Notes

Kathryn M. Borman is Professor of Anthropology at the University of South Florida and is the principal investigator of research projects housed at the Alliance for Applied Research in Education and Anthropology (AAREA) in the Department of Anthropology.

Elaine Mueninghoff is Professor of Education Emerita at the University of Cincinnati's Clermont Campus where she has also served as an Associate Dean in addition to many years of service in Clermont's teacher preparation program.

Bridget A. Cotner is Research Associate at the Alliance for Applied Research in Education and Anthropology (AAREA) in the Department of Anthropology, University of South Florida.

Phyllis Fredrickson is Professor of Education Emerita at the University of Cincinnati's Clermont Campus and served in the teacher preparation program for many years before her recent retirement.

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TEACHER CERTIFICATION AND CREDENTIALS: FROM A FOCUS ON QUALIFICATION TO A COMMITMENT TO PERFORMANCE

Scott Imig, Stephen Koziol, Virginia Pilato, and David Imig

Introduction

An often-repeated phrase among educational researchers is that *the variance in teacher quality within a school is greater than the variance among the schools in any district.* This same principle certainly applies when analyzing teacher certification in the United States and around the world. It does not, however, minimize the great policy and practice differences that exist between and among international countries with regard to educating and certifying teachers. Initial licensure, for example, is good for life in Japan, Hong Kong and England but in the United States, where each state has separate requirements, most teachers must renew their licenses throughout their career. Additionally, though most American teachers are required to pass a licensure examination after graduating from a teacher preparation program, teachers in Singapore and the Netherlands are under no such obligation (Wang, Coleman, Coley, & Phelps, 2003). While these differences are great, a closer look at teacher certification within the United States reveals countless systems and policies operating in often-contradictory ways.

In the United States, a system of teacher licensure is administered by the 50 states. Each of the states awards licenses to candidates who fulfill requirements established to ensure that all teachers are qualified to teach. Teacher licensure places a premium on prospective teachers meeting a set of prescribed criteria set by the state. It is a system that relies on candidates obtaining a baccalaureate degree, meeting state recognized standards, perhaps fulfilling specific course requirements, having a satisfactory grade point average, completing student teaching (also known as internship) requirements, and passing a state-administered or state-authorized tests that may include assessment of basic skills, subject matter knowledge, and pedagogical knowledge. Some states have additional requirements, but all expect that teacher candidates will fulfill what are viewed as minimal qualifications to teach the children of the particular state. It is a system, however, in flux as the system moves from one dependent upon prospective teachers meeting a set of qualifications for teaching to one that embraces successful performance by beginning teachers. This shift in emphasis is profound and carries with it enormous consequences for schools and colleges.

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Teaching qualifications are, according to Fabiano (1999), "state measures grounded on relatively objective assessments of the skills, abilities, and knowledge that [state policy makers] have determined to be important." Policy makers in the several states exercise authority over teaching in many ways. One of the most important ways they do this is by controlling access to teaching and awarding advanced certificates to experienced teachers. They exercise this authority by setting qualifications that respond to a variety of factors – social, political, economic – seeking to ensure that there is an adequate supply of qualified teachers to staff the schools of the particular state or territory. Policy makers appreciate that they can shape many dimensions of the teacher workforce by regulating the availability of teachers and setting the conditions for continuing practice. In most states, state legislators and state school board members have exercised their authority to regulate the quality and the availability of teachers for classrooms. They have established qualifications that have to be met before one can obtain a license to teach.

Teacher Licensure and Certification as Policy Tools

Teacher licensure is one of many policy tools available to policy makers to define, manage, and evaluate the system of schooling provided in a state. It is a means to ensure that an adequate supply of teachers is available for placement in teaching positions. Setting low standards for licensure guarantees an adequate supply of personnel to staff the state's public schools while setting high standards may retard the flow of candidates to teaching and create shortages, particularly in districts and schools unable to match salaries and benefits of more affluent communities. Revising licensure requirements to affect the flow of candidates into teaching is something that legislators and board members do in response to both internal needs and external pressures.

During the course of the past half-century, both state and national bodies have addressed the needs of America's schools and consistently recommended that the qualifications of beginning teachers must be raised. Usually these recommendations were made in the reports of national commissions assigned to look at teaching and America's schools. While there have been hundreds of state and national reports issued in recent years, one noteworthy report is that of the National Center on Education and the Economy's New Commission on the Skills of the American Workforce. Issued in late 2006, Tough Choices or Tough Times, is a report with the gravity of A Nation At Risk, but one intended to sustain, if not build, attention to the reform of America's schools. Tough Choices calls for radical changes in every aspect of schooling but emphasizes the importance of attracting and retaining "the best and brightest" to become teachers. The report insists that we "recruit from the top third of the high school graduates going on to college for the next generation of school teachers" and calls for changing the compensation system and conditions of work for all teachers (Tucker, 2006, pp. 12-13). It suggests that teacher qualifications have to be adjusted to bring high quality to the school system.

The Role of the State

Tough Choices or Tough Times is one of many indicators that policy makers and politicians, business leaders and media figures are leading a very public debate about the way that teachers should be recruited, prepared, socialized, compensated and promoted in America's schools. Should there be tighter controls or less regulation? Should local school principals be the dominant voice in selecting candidates for teaching or is this something best left to the state or some other "authority" to decide? Should all candidates for teaching be prepared in similar ways or should there be much greater diversity in the approaches taken in teacher education? What role should the teaching profession and professional associations have in determining the standards for and in selecting and certifying novice professionals? Should teacher compensation be "frontloaded" (more for beginners) and teacher pensions and health benefits redirected? Can we rely on non-governmental agencies (or, borrowing from our English colleagues, quasi non-governmental agencies or QUANGOS like the National Board for Professional Teaching Standards) to set teaching standards and ensure that candidates meet those standards? Do we need to reestablish (and reassert) state-authority through Teacher Development Agencies to recruit, train, and certify beginning teachers? These are the types of questions being raised by policy makers as they seek to Rise Above the Gathering Storm (the title of another 2006 report by the National Academy of Science that called for major new investments in science and mathematics teacher education) as America once again agonizes over its public schools and their seeming decline in comparison to the schools of other developed nations.

Once again we are engaged in a public debate regarding who should teach in America's classrooms. How do we get more and better candidates to come to teaching and how do we retain those who do make teaching a career choice are fundamental questions being addressed by a range of teachers' organizations, professional associations, think tanks and public forums. Political leaders on the Right and Left have "staked-out" positions on these issues and political parties now adopt "planks" in their political platforms that address such concerns. In a system of schools established by state constitutional mandates and regulated by state policies and practices, the authority of the state remains dominant relative to the preparation and practice of public school teachers. Though it was not until the end of the 19th century and beginning of the 20th century that states fully asserted control over the licensure of schoolteachers in America, they have gained that power and now represent the dominant voice in the preparation and practice of schoolteachers in America.

While it is important to recognize that there is a tripartite relationship among state education agencies (usually a state superintendent for public instruction or public schools or education), local education agencies (hiring authorities), and teacher preparation institutions (colleges and universities and other recognized agencies) that is intended to ensure an adequate supply of well-qualified teachers, the state retains the dominant *de jure* role in that relationship. The state sets the expectations for beginning teachers, the preparation institutions "educate" men and women to reach these expectations, and local districts hire from the pool of "state recognized" candidates that are provided. This is the system that is widely recognized to exist and it is one that will likely persist despite

the myriad of challenges to its form and function. It is also what is commonly known as the "traditional" route to teaching in America's classrooms. An example of a state that weds the three members of the tripartite relationship is Maryland, where the P-16 community requires that "traditional" programs preparing teachers for elementary, middle, and secondary teaching provide year-long internships in professional development schools, which are like the teaching hospitals of medicine.

Teacher Licensure in the United States

While those inside and outside of the profession use the terms teacher certification and teacher licensure interchangeably, a clear distinction between the two can be drawn. Cronin (1983) differentiated between them by stating, "Certification is the process of deciding that an individual meets the minimum standards of competence in a profession. Licensing is the legal process of permitting a person to practice a trade or profession once he or she has met certification standards" (p. 175). Thus, by Cronin's definition, certification was something that a training or preparation program asserted when the candidate successfully completed the course of study to become a teacher. A license was awarded by the state following this certification by the institution. It was expected that teacher education providers would align their training programs with the standards or criteria set by the state and the national professional associations. To facilitate this alignment, teacher education programs in a state seek program approval. In existing systems of licensure and certification, graduates of approved programs who have met qualifying scores on state-required tests are considered qualified to teach because they have met the qualifications set by the state. While Cronin's delineation between certification and licensure offers clarity, it is also true that many states contend they alone have control over both licensure and certification.

Teacher licensing and certification came into being in the United States in the late 1660s as communities in New England required tests of those who sought employment as teachers. These tests were developed by local school boards and usually accompanied a screening process in which a candidate's readiness to teach was also based on his/her "moral fitness to teach" (Cushman, 1977). However, a lack of available teaching candidates usually forced local school boards to bend their requirements to meet the skills of any applicant. In the early 1800s, the development of state sponsored teacher preparation schools, known as normal schools, brought the concept of certification into existence. By the 1850s, many localities accepted completion of a course of study in one of the normal schools as grounds for licensure. By the 20th century, prospective teachers in most states were mandated to complete a set of specified courses in a collegiate institution and "teaching majors of one sort or another" (Cronin, 1983). States took over control of teacher licensure during the 20th century. In 1898 just three states had established systems of state licensure but that number swelled to 26 in 1919. By 1967, all states controlled the process by which individuals gained licensure to teach (Bush & Enemark, 1975).

Challenges to Traditional Preparation and Certification

In recent years the traditional or dominant role of the states in teacher licensure and certification has been challenged. At least three challengers have emerged to question their prerogative: (1) local control advocates - in many cases those who are dissatisfied with state regulation and control and who call for an agenda of deregulation and an advocacy for competitive certification - they seek to minimize state authority and to empower non-colleges and universities to assume a primary role in teacher education - and they contend that local school principals (rather than the state or training institutions) should have the dominant voice in who teaches; (2) professional control advocates - who argue that teaching should be regulated and controlled by peers rather than state bureaucrats - that teaching should be governed in ways similar to the way that state medical societies and bar associations work - who advocate independent or autonomous state professional practice boards to grant and revoke licenses - and who build QUANGOS to assume the "extra-state" role in the licensure or certification of teachers; and, (3) regional or national control advocates - who argue that teaching is national in scope - that free markets should exist that promote competition among districts in luring the best teachers to their schools who promote inter-state movement of teachers, encourage "pension portability," and insist that better conditions for practice would alleviate many of the problems of an inadequate supply of teachers in mathematics, sciences, special education and other fields of study - who believe that a national rather than a state or local response would enhance teacher quality everywhere and overcome the "mal-distribution" of highly skilled teachers.

Understanding teacher certification and licensure in the United States at the beginning of the 21st century is to understand the competing and often contentious voices that advocate for these various positions and the influence they are exerting on teacher policy. Advocates for professionalization and greater regulation of teaching are confronted by advocates for deregulation and a system described as "competitive certification." Yet, while it is possible that licensing and certification will be transformed, it seems unlikely that the system will shift away from the prominent role that states have in setting the qualifications and administrating the system of licensure.

Traditional Routes¹

Great variance exists when attempting to define the traditional path into teaching but it is widely understood to demand the greatest commitment in terms of time and numbers of courses of study. Traditional route students preparing to teach in elementary schools earn a bachelor's degree in education or another area to which the professional education requirements are added, and complete a student teaching placement under the direction of a supervising teacher (Laczko-Kerr, 2002). Those in traditional routes preparing to teach in middle or secondary schools earn a bachelor's degree in a discipline or field-of-study and take courses in education and complete a student teaching placement. Undergraduate teacher education programs tend to require 134 credit hours of coursework (compared with 120 h for most other majors) and students spend, on average, 14.5 weeks in their student teaching placement. According to Roth and Swail (2000), the following typify the requirements for preliminary certification along the traditional route:

- Bachelor's or higher degree (master's and/or fifth year of study)
- · Completed state approved teacher education program
- Major or minor in education (if elementary candidate)
- Major in the subject area they plan to teach (if secondary candidate)
- Assessment of competency (state-developed or vendor-developed tests)
- · Completion of special coursework in state recommended subject areas

Though easily understood, the above list provides a sanitized analysis of typical traditional route criteria. It is right to assume that any decentralized endeavor involving so many players, so many levels of bureaucracy, so much money, and ultimately so many American children, cannot be so easily defined. Great discrepancies over what constitutes an academic major or minor in colleges and universities exist among and between states. The number of content area and pedagogical courses, as well as placement hours, varies greatly between and among programs and states. Additionally, to meet critical needs, many states created ways to circumvent the process so that teachers prepared in one area (e.g., elementary education) could simply pass a subject area test (e.g., biology) to teach in another area. Prior to 2006, the date established in the *No Child Left Behind Act of 2001* for ensuring that core academic subject teachers are all highly qualified, states had a multitude of ways to by-pass the traditional licensing process to enable people to teach with "emergency certification" or with various other kinds of waivers and exemptions so that they could fill classrooms with adults capable of supervising young children.

Well before the advent of federal and state policies that promoted alternative certification, hundreds of one and 2-year post-baccalaureate and Master's of Arts in Teaching (MAT) programs, offered by the same schools, colleges and departments of education that offered "traditional" degrees in teacher education, existed and afforded candidates a range of pathways to teaching. Making all of this more complicated is the fact that states award hundreds of licenses to candidates for different levels of schooling (primary, elementary, middle, junior high, senior high, secondary), different subject matter, and for special roles and assignments (counseling, leadership, librarian, technologist.) Moreover, to be credentialed as a reading specialist, English language specialist, or mathematics resource teacher usually requires additional qualifications and endorsements, and speech therapists, occupational and professional therapists, and social workers have other requirements and licensure processes.

Traditional teacher education has been a system that relied on colleges and universities recommending their graduates to the state for licensure upon program completion and, in some states, submitting their credentials to the state while other candidates brought their credentials directly to the state for review and recognition. For nearly a century, states operated this dual system of licensure and used a system of waivers and emergency certificates to staff their schools. While states have long sought to standardize or streamline the process of teacher certification and licensure, what existed in the early 1980s and

increasing rapidly to the present time was a system of multiple pathways to teaching with many alternative routes and ways for the state to award provisional or emergency certificates to candidates in high-need areas. There were even ways to ensure that exemplary individuals could be awarded teacher licenses as a way to deflect the old canard that Albert Einstein wouldn't qualify to teach in America's schools. All of this made the system highly complex and difficult to comprehend.

Alternative Routes and Alternative Certification

Despite the existence of these multiple pathways to teaching and a system that was responsive to the needs of particular schools and communities, when state policy makers were confronted with significant teacher shortages in the 1980s, they responded by creating what they described as a new policy direction for teaching – alternative certification. Faced with revenue shortages, which made the expansion of so-called traditional programs difficult, state policy makers sought new ways to maintain an adequate supply of candidates for teaching. Their response was to promote less expensive routes to teaching – often situated in non-collegiate settings and with the cooperation of local education authorities. In 1983, just eight states recognized formal alternative programs for entry into the teaching profession. By 2004, 43 states and the District of Columbia had programs to speed entry and fill critical need areas. Alternatively certified teachers now constitute fully one-fifth of the teachers hired annually.

One specific impetus for attention to alternative certification came with the downsizing of schools in urban districts of New Jersey in the early 1980s and the need to have experienced or senior teachers retrained to teach in subject areas experiencing teacher shortages. Looking for quick and efficient ways to retrain current teachers in a heavily oriented "collective bargaining" environment, New Jersey created a system of alternative certification that was quickly championed as a dynamic new way to prepare teachers for urban schools. In a radical shift from the norm, individual school districts within the state were given the authority to develop their own teacher training programs and the state issued teaching licenses to program completers. The attraction of high numbers of African-Americans and other minority teachers to these programs reinforced their attractiveness and helped to launch a movement that soon involved dozens of other states.

New Jersey's approach took on political dimensions when it attracted the attention of President George H.W. Bush and he championed alternative certification as a solution to many of the problems that confronted America's schools. It soon came to be an accepted part of the Republican agenda for change in education and was embraced by successive administrations – both Republican and Democratic. Perhaps the clearest articulation of its importance was found in Secretary of Education Rod Paige's endorsement of alternative certification in 2004:

Expanding the education workforce at the necessary pace while also ensuring that teachers are effective and motivated to stay on the job requires new ways of recruiting, training, and supporting teacher candidates. We cannot rely exclusively on traditional teacher preparation programs to ratchet up their efforts.

We need to develop new routes to teacher certification, giving more candidates more access through high-quality alternative teacher preparation programs designed to meet local needs.

Secretary Paige's call came as the demand for more teachers escalated and the country sought ways to attract both more and more high quality candidates to teaching. While blue-ribbon commissions lamented the way we prepared teachers and called for the expansion or extension of preparation programs to meet the demands of a rapidly escalating school population (NCTAF, 1996), policy makers promoted alternative routes and alternative certification as the way to attract more candidates to teaching. Their assertion seemed to be that the nation's 1,300 schools of education were not capable of producing the 200,000 teachers needed annually to replace or expand the workforce for the nation's schools. Principals, who just a decade before culled through stacks of resumes from hopeful candidates, now struggled to place warm bodies in their classrooms in late August. This problem was particularly acute in high poverty inner city and rural school systems where it was projected over 700,000 new teachers would be needed in the first decade of the 21st century (NCES, 2000). Coupled with this shortage of teachers was the common refrain from educational policymakers, researchers, and even some teacher educators, that our education school graduates were ill prepared for the challenges of our nation's changing classrooms. They offered data that suggested that our K-12 students were no better served by graduates of traditional education schools than by individuals who enter the classroom through alternative routes (Ballou & Podgursky, 2000; Goldhaber & Brewer, 2002; Leigh & Mead, 2005; Mathematica, 2004; Rotherham & Mead, 2003; Walsh, 2001). In short, rising demand together with powerful calls for change is altering the way we prepare and certify teachers in the United States.

While the current dearth of teacher candidates is fueling efforts to overhaul the structures and policies in teacher education and licensure, policymakers who are promoting change are also tapping into an established vein of public anxiety over our nation's education system. For as long as we have entrusted our children, our most precious asset, to our nation's public schools, we have questioned the caliber of our teachers and the training they receive. In 1920, after having conducted an ambitious 5-year study of teacher education in the United States, William Learned and William Bagley issued their findings in Carnegie's Bulletin #14, The Professional Preparation of Teachers for American Public Schools. Paramount among their recommendations was the call for a "new training for teachers." Appalled by the generally poor training of teachers in the early 20th century, the authors demanded a fresh emphasis on quality and ability. Learned and Bagley stated, "We need to pick out men and women of large ability and give them a long and thorough preparation aimed solely at their future task" (Learned & Bagley with Charles et al., 1920, p. 10). While they certainly did not echo today's calls for truncated routes into teaching, they did make the case for a new commitment to improving the quality of teachers we entrust with our children. Though 85 years old, the findings of the Carnegie study questioning the caliber of classroom teachers are affirmed in survey after survey conducted today. Forty-seven percent of the American public

thinks a lack of quality teaching contributes a great deal to why students fail to learn (PDK, 2003). More damning for the profession, a majority of parents believe that people who choose teaching as a career tend to be just average compared to other college graduates (Reality Check, 2000).

The paramount purpose of alternative certification, according to its advocates, is to streamline the path into the profession. As Secretary of Education Rod Paige noted, "In too many of our states and communities, lots of talented people find that they cannot say yes to teaching because of hoops and hurdles that have been placed in their way" (Paige, 2004, p. v.). In his work, Kwiatkowski (1999) makes the case that alternative programs have developed to address one of four specific needs:

- Increase the number of teachers in specific subject areas (e.g. math, science, special education)
- · Increase the number of minority and underrepresented teachers
- · Increase the number of inner city and rural teachers
- · Minimize the demand for emergency certified teachers

In 2003, *Education Week*, a newspaper focused on American education, conducted a review of the states offering alternative routes into teaching. Their findings indicated that just 24 states and the District of Columbia had both established training programs for alternative route teachers prior to entering the classroom and were providing support for them by a mentor during teaching. The alternative routes in the remaining states appear to be little more than a version of "renewable emergency certificates" (p. 58) that promoted rapid access to teaching. Prior to the enactment of the *No Child Left Behind Act of 2001*, states often resorted to emergency certificates to fill classrooms in high need areas and school districts. Teachers could be hired on one-time-only, short-term contracts (generally 1 or 2 years) but were often allowed to extend these contracts when other more qualified teachers could not be found. Requirements for emergency certification examination.

It would be difficult to document all of the alternative routes into the American classroom today. There are over 50 different paths in the state of Texas alone. In its reporting, *Education Week* analyzed entrance requirements, training and mentoring support provided through 25 state alternative route programs. Many similarities are evident across programs including the passage of a teacher-licensing exam in 18 states. Fourteen states require a minimum grade point average for applicants and 19 states provide new hires with at least 1 year of mentoring on the job. Striking differences are also evident across states. For example, Arkansas' Non-Traditional Licensure Program mandates 2 weeks of training prior to entering the classroom and provides new teachers with 1 h of mentoring each week during their first 2 years of teaching. North Carolina's NC Teach program with its 5 weeks of teacher training and 3 years of mentoring is comparatively more comprehensive (Education Week, 2003). In 2005 the State of Maryland increased its emphasis on alternative route candidates' readiness to teach by requiring an 8 week internship with daily supervision to precede full-time mentored teaching on a residency certificate for 1—2 years.

National Policy Promotion of Alternative Certification

Perhaps the most significant challenge to "traditional" policies concerning state licensure and teacher education has occurred as a result of national efforts to cast alternative certification as a national solution to persistent problems of teacher shortage. One of the most widely known alternative programs has been Teach for America. A highly publicized and well-recognized program, it draws recent college graduates from selective colleges and universities into teaching for 2 years in an inner city or rural area. This highly selective program accepts just over 15% of applicants and the program remains small. In the 2002–2003 academic year, just 2,471 teachers were hired through Teach for America to teach. Teach for America has attracted both federal resources and philanthropic contributions with its advocacy for the "elimination of educational inequity." In its current form, the program provides those accepted with 5 weeks of intensive summer training during which they receive preparation in the fundamentals of teaching and some guided teaching experience under the supervision of a mentor for at least 2 h each day. During the school year, TFA teachers continue to receive on-site mentoring while they also continue with professional courses. These practices have helped the Teach for America Program reduce attrition rates and most candidates are now completing their the 2-year assignment in some of the nation's most demanding schools. It has also served as a model for policy makers and teacher educators as they seek to remake teacher education and the teacher workforce.

The No Child Left Behind Act of 2001 has also led to other ambitious federal efforts to promote alternative routes to teaching and eligibility for certification and licensure. In 2002, the push for alternative certification found form in the creation of an extra-state licensing authority called the American Board for the Certification of Teacher Excellence (ABCTE). In what might be considered a radical program even among alternative paths, the American Board for the Certification of Teacher Excellence online testing program was developed in 2001 with a \$5 million initial grant from the U.S. Department of Education. ABCTE's Pathwise enables individuals with a college degree, and no felony convictions, to pass a series of ABCTE-developed examinations for certification. Currently recognized as an approved route in six states albeit with additional state-specific requirements, ABCTE is also favorite program of the current Bush administration - receiving an additional \$35 million in federal funding in 2003. In his Second Annual Report on Teacher Quality, Paige (2003) wrote, "[ABCTE] focuses on what teachers need to know and be able to do in order to be effective, instead of the number of credits or courses they've taken. It demands excellence rather than exercises in filling bureaucratic requirements" (p. 27). National Education Association President Reg Weaver (2003) issued an early warning calling the ABCTE program a "sham" and "demeaning" to the profession. The explosive growth of ABCTE, from 11 graduates in 2004 to the announcement of their 3,000th student in 2006 stunned many within the education community. Weaver's warning that, "There are no shortcuts to becoming a quality teacher," is clearly being ignored by states choosing to take advantage of ABCTE's truncated certification route. Reacting to state's concerns about shortcuts that do not prepare nontraditional teachers for the

classroom, ABCTE has continually made adjustments to appear to be more like a program than just a testing option.

Another federally touted online route is offered by Western Governors University. An online consortium of 19 Western states and 45 universities, WGU was awarded a \$10 million federal grant in 2001 to "develop a competency-based distance learning program for teaching candidates" (Paige, 2003). Like ABCTE, WGU's route requires passage of online assessments for certification but it also blends these with extensive online and in-classroom mentoring. Eighty-five percent of WGU's rapidly growing student body is from underserved populations (e.g. African-American, Hispanic, rural, economically disadvantaged, etc.) making a strong case that this program fills a real need. To the surprise of some traditional route providers, the National Council for the Accreditation of Teacher Education (NCATE) bestowed accreditation on WGU in 2006, using established NCATE standards and procedures. Perhaps reading the writing on the wall, NCATE President Art Wise touted the move as evidence, "that NCATE has the capacity to review non-traditional providers to determine the quality of their teacher preparation programs" (NCATE, 2000).

Impetus for Change

A much-publicized study of education schools recently noted that teacher education resides in a world of chaotic policies and practices. Arthur Levine, former President of Columbia University's Teachers College, suggested that "Teacher education is the Dodge City of the education world....like the fabled Wild West town, it is unruly and chaotic. There is no standard approach to where and how teachers should be prepared, and the ongoing debate over whether teaching is a profession or a craft has too often blurred the mission of education schools that are uncertain whether to become professional schools or continue to be grounded in the more academic world of arts and sciences." Levine called for greater professional regulation and control. One response to Levine was the call for action by the National Council on Education and the Economy (NCEE), noted above, with its message that states (rather than professional entities) had to refashion and redesign the entire system of licensure and certification. Their message that new structures and agencies were required to address matters of teacher quality and performance would enhance and reinforce the role of the states in this process (Tucker, 2006).

Recognizing that teacher shortages are likely to persist as a problem, policy makers such as those in the NCEE seem determined to maintain high standards but use a variety of other means to attract the best and brightest of our university students to careers in teaching. Central in their recommendations are the call for reforms in the current system of teacher incentives and compensation, working conditions and pension benefits to attract more and more highly qualified candidates. They propose, for example, redirecting monies in the current system to "front-load" the compensation system (more money for beginning teachers) to serve as a major incentive for bright and able college students faced with a number of career options. How serious policy makers are to increasing the quality of beginning teachers will be measured by how consistent they are in maintaining high standards for entry. It is certain that they will be facing a continuing policy dilemma – how to simultaneously guarantee an adequate supply of beginning teachers to staff America's classrooms (given everything we know about working conditions) while raising the quality of those candidates to meet the expectations of parents and the public. Today we are seeking to remake the teacher work force into a high quality teaching force capable of serving an increasingly diverse student population. The great challenge is to do so in a fiscally conservative way and yet achieve the goal of having a highly qualified teacher for every child. Addressing this challenge will play out state-by-state and district-by-district, where policies are made.

Today's Situation

We conclude this chapter with a brief description of several different but not mutually exclusive trends in how some states are addressing the need for more meaningful and more authentic evidence to support the issuing of licenses to teach. Common among these trends is the shift from qualification-based decision-making to performance-based decision-making in the licensure process.

One trend is to require teaching candidates to demonstrate explicit evidence of teaching abilities and understandings on a state mandated set of performance tasks in a licensure area. In standard practice, as the culminating evidential piece, in addition to such things as having completed the required academic studies and passed the required tests, judgments about a licensure candidate's "fitness" or eligibility to teach is determined by a cooperating teacher and university program representative based on the candidate's overall performance during student teaching or internship. While there are common elements to these overall performance judgments, such as consideration of abilities in planning for instruction, implementing instruction, using assessments, organizing for instruction, and promoting a positive classroom environment, there is little evidence that different programs make judgments on comparable criteria or that judgments are in themselves reliable. This has prompted some states, most notably Connecticut and more recently California and Oregon to incorporate focused performance assessment tasks with candidate performance assessed on common state-developed analytic rating systems as part of a two-tiered basis for determining a candidate's eligibility for licensure. These assessment systems are being developed along lines used successfully by the National Board for Professional Teaching Standards in their national certification program for recognizing accomplished teachers. It is worthwhile to note that the Educational Testing Services' PRAXIS III assessment is also built around direct observation of novice teacher classroom performance along specific behavioral domains. In the states of Ohio and Arkansas, all entry-level teachers must pass this classroom performance assessment during the first years of teaching in order to apply for a professional teaching license. The systems allow candidates completing traditional or alternative certification programs to earn temporary licenses pending their completing and passing the state-developed performance assessment within their first 2 years of teaching, at which time those who pass earn a standard license. While

there are numerous issues with this type of approach such as cost, validity of assessments, reliability of judgments and ratings, and impact on recruitment to teaching, these initiatives do show promise in providing a basis for more systematic and meaningful state-based responsibility in monitoring teacher licensing and in developing evidential bases for quality-based comparisons among competing visions of effective teacher education program design and practice.

A second trend is that of mandating lengthening the process of certification to include not just the initial background preparation and internship with a mentor teacher, but an additional period of residency before a candidate can be awarded a standard or full license. Candidates would still bring a college degree, evidence of successful student teaching or internship experience, and satisfactory performance on required standardized tests of teacher knowledge, but there would also be the expectation that the candidates demonstrate their effectiveness in local school contexts over their first 2 or 3 years, with judgments of effectiveness made by responsible school personnel at the local level. This approach reasserts a prominent role for the local school district in the licensure decision-making and assumes that local education agencies have the mentors, supervisors, and administrators with appropriate background and training to provide both effective induction support and responsible performance evaluations of early career teachers. This also makes the leap of faith to assume these districts will have the financial resources to support this added responsibility. A variation of this trend is the expansion of student teaching during initial preparation through yearlong internships in education's version of teaching hospitals called professional development schools. By state policy, Maryland requires its colleges and universities to partner with local schools in the preparation of new teachers and the ongoing development of practicing teachers. In this model, new teacher preparation and induction are blended.

A third trend is that of tying licensure to a candidate's ability to positively effect student academic achievement. This trend will dominate policy agendas, influence legislation and drive licensure discussions and decisions for the foreseeable future. In this approach, licensure decisions will no longer be based only on the background qualifications or overall judgments of performance in teaching but on evidence that a candidate has had an impact on students' learning - a positive impact regardless of student characteristics or classroom context. Most often, proponents of this approach have called for the measuring of the performance of the novice teacher based on the performance of his/her students on various standardized measures of student achievement. The value-added modeling work of William Sanders and others has provided policy makers with a tool they believe allows states to make valid, reliable judgments about the effectiveness of novice teachers. Sanders' model uses multiple years of students' prior standardized test performance to predict expected future gains. His work demonstrates how students exposed to ineffective teachers fall precipitously off their expected growth curve while those students lucky enough to be exposed to multiple high quality teachers demonstrate remarkable gains on the standardized measures (Sanders & Rivers, 1996). States such as Texas, Florida, and Kentucky are well on their way to using value-added modeling to judge the effectiveness of schools and teachers. (It is important to note that value-added models rely on complex state data systems that currently exist in just a few states with the ability to link student and

teacher data.) In the future when the pendulum has swung back and the desperate calls for new teachers have faded, we believe the cries of parents and teachers unhappy with endless testing and test-driven curricula will start a new debate about what the "value" in value-added should mean.

The pathway that licensure and certification will take from an emphasis on qualification to a reliance on performance defies the labels of professionalism or deregulation. Rather, the new system of licensure is likely to meld aspects of the existing qualification model with new attention to teacher performance. Blurring the boundaries between preparation and induction will continue as high-stakes performance assessments become *de rigeur* in traditional and alternative entry routes to the profession. New assessment products coupled with much greater reliance on student performance data signals an important transition in the way that states will award licenses to novice teachers. The role of professional bodies and their attempts to organize advanced certification *vis a vis* initial licensure will serve as a template for many states in their pursuit of a new system built on the basis of performance. The transition from qualification to performance is certain to be controversial and there will be much debate regarding its suitability for America's schools. What is also certain is that licensure and certification will continue as policy tools used by policy makers and politicians to push the agenda for school change in the United States.

Biographical Notes

Scott Imig is an Assistant Professor in the Department of Educational Leadership in the Watson School of Education at the University of North Carolina Wilmington. He also directs the University's Curriculum, Instruction and Supervision program. From 2003–06, Imig served as the Director of the University of Virginia's Teaching Assessment Initiative, the research arm of the University's Carnegie funded Teachers for a New Era grant. In that role, he researched and documented multiple ways teacher education adds value to K-12 schools. Imig has written extensively about teacher education, teacher certification, and teacher effectiveness.

Stephen Koziol has been Professor and Chair of the Department of Curriculum and Instruction in the College of Education at the University of Maryland since 2003, and in 2007 he took on the additional role as Interim Associate Dean for Academic Programs. Before then, he was a faculty member (1970–97) and Department Chair (1985–93) of the Department of Instruction and Learning at the University of Pittsburgh (1970–97) and then Professor and Chair of the Department of Teacher Education at Michigan State University (1997–03). He is the author of articles, book chapters, monographs, and professional texts on English teaching practices and teacher education, the design and use of drama activities for active learning in classrooms, and on policy, practice and design in teacher education programs. He has participated in professional development or reform initiatives with major national groups such as the Holmes Group, the National Board for Professional Teaching Standards and INTASC and internationally with World Bank and UNICEF- sponsored reform projects in Egypt and Bosnia-Herzegovina. **Virginia H. Pilato** is the Director Certification and Accreditation at the Maryland State Department of Education, where she has responsibility for educator preparation, including alternative teacher preparation. Dr. Pilato is the past (2004–2005) president of the National Association of State Directors of Teacher Education and Certification. A member of the NCATE Board of Examiners from 1992 to 2006, Dr. Pilato serves on the international Teacher Education Recognition Decision Council that in 2004 first used NCATE standards internationally. Dr. Pilato has directed numerous projects supporting teacher preparation, and has served on numerous national committees. She recently published a professional development school case study in *Implementing PDS Standards, Stories from the Field*, published by NCATE.

David Imig is a Professor of Practice in the College of Education at the University of Maryland, College Park where he also heads the Teacher Education and Professional Development Unit and serves as Associate Chair for Curriculum and Instruction. Imig directs the Carnegie Foundation's Project on the Education Doctorate, a consortium of 21 colleges and universities invested in transforming their professional practice doctorate. Prior to coming to College Park, Imig was president and chief executive officer of the American Association of Colleges for Teacher Education for 25 years. He has served on numerous boards and study groups and consulted on teacher education and public policy with colleges and universities in the United States and abroad. He currently serves as chair of the board for the National Society for the Study of Education.

Note

Many in the profession of teaching oppose use of the phrase "traditional" to describe either the
preparation or the licensure of teachers. They would draw a distinction between professional and
non-professional and describe alternative preparation and licensure as non-professional or even antiprofessional. Given the audience for this handbook, we have elected to use the phrase as policy makers
in the United States would use it.

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THE CONTINUING EDUCATION OF TEACHERS: IN-SERVICE TRAINING AND WORKSHOPS

Robert V. Bullough, Jr.

Introduction

The diversity and range of the opportunities teachers have for learning make writing meaningfully about inservice teacher education difficult. Teachers learn from many activities, formal and informal. They learn from practice itself when stopping to consider a struggling student's response to a homework question, conversations in the hallways and lunchrooms with other teachers, observing in a peer's classroom, results from a supervisor or mentor's visit, reading, attending conferences, district workshops, university courses, and in all sorts of other often unanticipated ways. Each of these activities may refresh a teacher's commitment to teaching and expand their understanding of the work of teaching, or they may not. Little wonder some scholars find reason to complain about reliance on an "incoherent and cobbled-together nonsystem [of] inservice [education for teachers]" (Wilson & Berne, 1999, p. 174).

The situation is made more difficult by the complexity of teacher learning. Teachers bring to formal inservice programs differing attitudes and beliefs born of years of life and work experience, positive and negative, that profoundly affect learning outcomes. Motives for participation also differ (Halpin, Croll, & Redman, 1990) and influence how inservice is received, if at all (Bullough & Baughman, 1997). Moreover, demonstrating program results is challenging. Most research on the effects of inservice teacher education rely on teacher self-report of teaching practices "which are known to overestimate actual implementation and thus represent a weak proxy for the actual enactment of reform in classroom instruction" (Knapp, 2003, p. 120). Such reports give little insight into why or how change occurs. It is difficult to isolate variables and to establish causal relationships (Flecknoe, 2000), particularly with student learning. Lastly, most studies are local, reporting on the results of a program developed by authors and often involving very few teachers, usually volunteers, which makes generalizing findings impossible.

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Increasing Teacher Capacity

Despite these challenges, the rise of the standards movement – the emphasis on meeting minimal standards of tested student achievement – throughout much of the industrialized world has dramatically increased pressures on teachers to improve their performance and in turn boost student learning. Given traditions of decentralized control of schooling, in the US the effort to develop national standards came comparatively late. Reflecting a growing political consensus and naive optimism, in 1991 Congress established the National Council on Education Standards and Testing (NCEST) to encourage the development of voluntary national standards and tests.

In its definition of national standards, the NCEST report emphasized that they should "include substantive content together with complex problem-solving and higher order thinking skills". It further stipulated that standards must provide focus and direction, not become a national curriculum, and that they must be dynamic, not static. (Wixson, Dutro, & Athan, 2003, p. 73)

Passage of the No Child Left Behind Act of 2001 (Public Law 107–110) accelerated movement toward de facto national standards, and signaled a move away from the initial views of NCEST such that "accountability through annual testing in NCLB virtually dictates a view of content standards as measurable objectives. [Thus what] began in the standards movement as the promise of moving beyond behaviorist thinking in teaching and learning now threatens to bring us right back to where we started" (Wixson et al., 2003, p. 82).

Using both incentives and threats of punishment, virtually all levels of government in Europe, North American, and Australia, are actively engaged in a variety of initiatives to improve teacher quality and build capacity. Policy makers expect results, and quickly, and proof comes in rising standardized student test scores – outputs rather than traditional inputs now matter most. This is the case even though teachers are often rewarded with higher salaries for inputs, participation in additional and on-going teacher education and accumulating the requisite "points" or "hours." Sometimes involvement in inservice teacher education is a condition for continuing licensure. Nevertheless, comparatively narrow views of assessment and accountability drive reform. Student test scores are published in newspapers, schools compared and ranked, and school and, by inference, teacher failures are very public. No longer can a teacher close the classroom door and expect to find safety or security therein. Teaching, as Parker Palmer (1998) has observed, is a "daily exercise in vulnerability" (p. 17) and the best and perhaps only response is to increase teaching competence often understood very narrowly.

These are not the only reasons for the increasing importance world-wide of inservice teacher education, however. There is a growing appreciation that teachers do make a positive difference in student performance (Wenglinsky, 2000). Day (1999) makes the point directly: "Teachers are the schools greatest asset... Successful school development is dependent upon successful teacher development" (p. 2). Worldwide life and educational aspirations are rising driven, in part, by rapidly increasing and very young populations. Davies and Preston (2002), for example, observe that "Spiraling

population growth in Asia, Africa and Latin America [has] led to retraining and upgrading of large cohorts of teachers to meet the needs of their students. This was particularly true in China where primary school teachers comprise one-fifth of all the teachers in the world" (p. 232).

A Bad Name and Checkered Past

Despite the need for ever increasing competence, among many teachers inservice teacher education often has a bad name. The thought of being required to attend an inservice meeting is frequently greeted by teachers with a groan. Often short, poorly conceived, lacking in personal connection and value, and seeking little more than to increase teacher awareness of one or another topic or practice, it is not surprising that "reviews of professional development research," as Guskey (2002) notes, "consistently point out the ineffectiveness of most programs" (pp. 381–2). Barone, Berliner, Blanchard, Casanova, and McGowan (1996) offer the biting conclusion: "Inservice teacher education throughout the [US] is a scandal" (p. 1130). Alternatives are being actively sought and sometimes, as Wilson and Berne (1999) caution, the tendency may be to embrace new activities merely because of a "desire to escape collective bad memories of drab professional development workshops rather than in sound empirical work… New is not always right" (p. 176). Of all forms of formal teacher inservice workshops probably have the worse reputations but this was not always so.

When the first workshop was held under sponsorship of the 8-Year Study and the Progressive Education Association in the summer of 1936 at The Ohio State University, the experience was uniformly and enthusiastically praised by the participating teachers who eagerly sought opportunities for self and professional improvement (Bullough & Kridel, 2003; Kridel & Bullough, 2007). From this auspicious beginning other PEA sponsored workshops followed and generated similar praise as teachers and school administrators, with the support of participating social scientists and university educators, developed new forms of curricula, including interdisciplinary core programs, a variety of teaching materials, assessment instruments, explored the disciplines, built friendships, and engaged in programs of general education that included experience in the arts (Heaton, Camp, & Diederich, 1940). Lasting for several weeks, each workshop was organized thematically, and involved focused, extensive, and intensive efforts to address problems and issues brought by the teachers from their schools for study and action coupled with on-going and consistent follow-up and on-site support. Successful inservice - programs that lead to desirable teacher and school change - as the educators involved in the 8-Year Study came to understand, is expensive, responsive to and centered upon genuine teacher concerns, time consuming, continuous, and results are inevitably uncertain and indirect. During and following World War II, these lessons were forgotten as other more pressing issues demanded the attention of educators world-wide, although it is doubtful they were ever well or widely understood (see Prall & Cushman, 1944). The conclusion is clear, the history of inservice education in much of the world has been and remains one of fits and starts, and of constant and often unhappy rediscovery.

Separate Roads: Teacher Research and School Accountability

For much of the 1980s and 1990s, the aim of inservice teacher education was *professional* development, to assist teachers to direct their own development like other higher status professionals. Especially there was increased appreciation of how school contexts shape teacher development and growing emphasis on creating conditions supportive of teacher growth collectively and individually: "Professional development relates both to the experience, attitudes and capabilities of an individual on the one hand and to the culture of a school or other organization on the other. A school in which teachers individually and collectively are seeking to develop and extend their expertise is one that is likely to value professional growth. It is, therefore, possible to think of creating a climate within a school conducive to both individual and school development" (Craft, 1996, p. 41). Sarason (1993) made the point directly: "If the conditions that make for productive growth and learning do not exist for teachers, the teachers will be unable to help create and sustain those conditions for their students" (p. 182). Out of the interest in professional development arose what has been described as the "Teacher Research Movement" (Cochran-Smith & Lytle, 1999).

Emphasizing "teacher as knower and as agent of change" (ibid., p. 22), the teacher research movement took many forms, most especially one or another variety of action research as practical inquiry and as social action. On this model, as Christopher Day (1997) aptly put it, teachers engage in research that is "close to the customer" (p. 49). The intent of this form of teacher development is nicely illustrated by the title of a book edited by Dixie Goswami and Peter Stillman reporting several teacher inquiry projects: "Reclaiming the classroom: Teacher research as an agency for change" (1987). Frequently supported by higher education programs (Burchell, Dyson, & Rees, 2002; Crockett, 2002), often master degree programs (Crow, Bullough, Kauchak, Hobbs, & Stokes, 1996), teachers engage in inquiries directly related to improving their own teaching practice and work to create school conditions more supportive of shared inquiry and student and teacher learning. As such, these efforts echo a conclusion of the Cooperative Study sponsored by the American Council on Education's Commission on Teacher Education (1939–1942): "It is not necessary - it is not even desirable - that some logically complete program should be thought up for the teachers in advance by administrators or outside experts" (Commission on Teacher Education, 1946, p. 132).

While teacher research continues to find an important place particularly in higher education-sponsored inservice teacher education, as noted, the political climate has changed, and radically so.

As pressures for school- and classroom-level accountability intensify, researchbased whole-school improvement models become increasingly widespread, the concept of best practice guides discussions about student achievement and teacher education, and the authoritative role of outsiders in school improvement becomes the rule rather than the exception. Part of what these developments have in common is a set of underlying assumptions about school change that de-emphasizes differences in local contexts, de-emphasizes the construction of local knowledge in and by school communities, and de-emphasizes the role of the teacher as decision maker and change agent. (Cochran-Smith & Lytle, 1999, p. 22)

Reminiscent of many of the inservice programs provided to teachers during the high mark of process-product research of the 1960s and 1970s, teachers are confronted once again with expert-driven programs of change which place a premium on fidelity of treatment over flexibility and teacher interest and initiative. Under these conditions, the emphasis of inservice is most frequently district rather than school-level teacher *training* and not *education*, where outcomes are known in advance and presumably predictable. Agendas are set and narrow, tending to focus on tested outcomes, and problems framed and solutions offered by specialists far removed from the day-to-day interactions of teaching.

Ironically, the emphasis on raising student test scores as proof of teacher quality may actually work against achieving the higher levels of student learning initially supported by NCEST and standards documents like those of the National Council of Teachers of Mathematics in the US that argue for problem solving and higher order thinking skills. Knapp (2003) warns:

The pedagogy of policies that lead to huge pressures for immediate results in the form of measurable student outcomes...deserves special attention. These pressures can direct both the form and content of professional learning experiences promoted by policy, not to mention the informal professional learning in which many educators continually engage. In particular, such pressures may divert attention from efforts among teachers to undertake the transformative learning often called for by standards-based reform. (p. 150)

Walker and Stott (2000) echo Knapp's warning: "All too often [professional development] has been used – like human growth hormone – for short-term gain and has had no noticeable impact on long-term performance in the classroom" (p. 68).

A Gap in the Research

Despite the growing emphasis on standardized testing as proof of student learning, reports of research on inservice education frequently fail to link teacher learning to student performance, and this presents a major challenge to researchers, as noted. Declaring an inservice activity effective without attending to its impact on student learning rings somewhat hollow although it is reasonable to assume that if teachers have learned something positive from an inservice activity students will benefit. "To create excellent programs of professional development, it is necessary to build an empirical knowledge base that links different forms of professional development to both teacher and student learning outcomes" (Fishman, Marx, Best, & Tal, 2003, p. 643). The importance of student data to teacher change is underscored by Guskey (2002) who argues that "significant change in teachers' attitudes and beliefs occurs primarily after they gain evidence of improvements in student learning" (p. 383). There are, of

course, abundant studies of teacher activities and actions having positively influenced student learning. There is, for example, a long list of studies of the positive effects of cooperating learning on student performance (see Slavin, 1995) and these results were gained because teachers were taught and then effectively implemented the method. However, generally missing are studies of teacher learning and of the process by which the change occurred, which is to say, studies of inservice programs–planned programs of teacher learning – and what made them effective or ineffective as judged by student learning results. Thus, to determine the effectiveness of inservice teacher education requires that data for both teachers and students be gathered and linked since teachers and the environment within which they work mediate student learning. In part, this is the challenge being undertaken by researchers in Ohio (Lasley, Siedentop, & Yinger, 2006) and elsewhere who speak of value-added research.

What Makes Inservice Effective?

Numerous lists of effective or promising inservice practices have been put forward (see Wilson & Berne, 1999). Few of these are grounded in large-scale, empirical research. A study by Garet, Porter, Desimone, Birman, and Yoon (2001) presents an important exception. This study, based on a national probability and cross-sectional sample of 1,027 science and mathematics teachers drew on data collected as part of an evaluation of the federally funded Eisenhower Professional Development Program for teachers in the US. The Eisenhower program does not endorse any particular view of inservice education but rather is a source of funding for a widerange of development activities. Although relying on teacher self-reports, data were gathered on teacher characteristics, activities, classroom behavior, and increases in knowledge and skills. Data on the school work context were also gathered. Analyses were made of three "dimensions of the substance or core of the professional development experience" (p. 919): The form or type of inservice activity (e.g., reform: mentoring, coaching, study group or network; traditional: workshop or conference), duration, including total contact hours spent in an activity, and the degree to which collective participation of groups of teachers from the same school, department, or grade level was involved ("collective participation") compared to teachers from individual schools. "Core features" of the activity were also investigated. These included: content focus (the degree to which the activity was centered on improving mathematics or science content knowledge); active learning (the degree to which the activity provided opportunities to teachers for active learning); and coherence (the degree to which the activity is "consistent with teachers" goals and aligned with state standards and assessment, and by encouraging continuing professional communication among teachers, p. 920).

Several conclusions followed: Time span and contact hours have a "substantial positive influence on opportunities for active learning and coherence" (p. 933). "Professional development is likely to be of higher quality if it is both sustained over time and involves a substantial number of hours" (p. 933). Coherence and content focus are strongly related to increases in knowledge and skills. Active learning is also

related but less strongly. Both enhanced knowledge and skills have a "substantial positive influence on change in teaching practice" as does coherence (p. 934). Coherence, which includes the integration of inservice activities in the school day, has a positive effect separate from and in addition to knowledge and skill enhancement. Although there is a great deal of overlap between reform and traditional inservice activities, very few teachers actually participated in reform activities. Importantly, when reform and traditional activities had the same duration, they had the same reported effects. "Thus, to improve professional development, it is more important to focus on the duration, collective participation, and the core features (i.e., content, active learning, and coherence) than type" (p. 936). Finally, the results support the "importance of collective participation and the coherence of professional development activities. Activities that are linked to teachers' other experiences, aligned with other reform efforts, and encouraging of professional communication among teachers appear to support change in teaching practices, even after the effects of enhanced knowledge and skills are taken into account" (p. 936).

Ultimately, the argument is for depth over breadth of experience and gives strong support to the value of collaborative inservice activities, particularly involving teachers from one school site, team or department. When coupled with wise and energetic leadership, adequate resources, and supportive policies these guidelines form a promising framework for designing effective inservice teacher education. They do not, however, tell the entire story. Research of another kind helps provide needed detail.

Drawing on an analysis of a set of case studies of professional development, Wilson and Berne (1999) underscore the importance of relations and relationship building in successful and effective inservice teacher education. The key, they argue, is for abundant and focused opportunities for teachers to "talk": "(a) opportunities to talk about (and "do") subject matter, (b) opportunities to talk about students and learning, and (c) opportunities to talk about teaching" (p. 177). They conclude that effective teacher inservice involves communities of learners working to refine their teaching practice, that "teacher learning ought not be bound and *delivered* but rather *activated*" (p. 194). Echoing Garet et al. (2001), on this view, effective inservice is rarely a "dissemination activity" but rather a constructive and critical activity.

Much inservice, even including action research, takes for granted that teachers are individual adult learners who work mostly alone and in isolation. If teacher talk is to lead to action it must be focused, purposeful, valued, sustainable, and consistent and this often requires systemic organizational and cultural change. To this end, work conditions must be altered to make interaction among teachers and between teachers and administrators easier and, through cultural change, expected, a normal part of the school day so that teachers can and expect to learn from one another and are invested in each other's learning and development. This is a key component of turning a school into a *professional learning community*, a concept that is currently garnering considerable interest among educators and researchers committed to school improvement (Bezzina, 2006).

Although there is a paucity of research on effects, the direction appears promising (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). A *professional learning community* is a community sharply focused on and committed to the proposition that learning

– not teaching – is the purpose of schooling, that to achieve this end educators must work closely together and collaboratively to develop their collective capacity, learning goals are clear and understood, leadership is widely shared and disseminated and problems solved internally, and formative assessment is frequent and decisions are data driven (DuFour, Eaker, & DuFour, 2005). Both the structure of schooling – how work is organized – and the culture of the school support the goals of student learning. On this view, teacher inservice is not imported to the school, unless needed to support a specific educational aim, but rather is part of what teachers do every day: Within a professional learning community to teach is to engage with others in the continuous inquiry into teaching and learning to better support student learning (Collinson, Cook, & Conley, 2006).

Future Directions: Activating Teacher Learning

Among the more intriguing concepts to emerge in the school change literature within recent years is "positive deviance." Arising from the work of Jerry Sternin in international development, the concept arose as a result of recognizing that within very difficult situations there are individuals whose performance positively deviates from established and often counter-productive norms and that from these individuals a great deal can be learned about how to improve an organization or practice. Such individuals resolve problems that overwhelm others, yet often they are ignored, even scorned by their peers. Rather than look within for extraordinary performance, inservice teacher education usually involves bringing in an expert from the outside who promises answers and quick solutions to persistent difficulties. Sadly, such approaches often fail to get the problems right. In contrast, positive deviance suggests that within every school and organization there is an abundance of expertise and skill available that holds promise for systemic improvement but that generally goes untapped. The concept of positive deviance is straightforward and its implications for schooling far reaching: "Organizations that are able to examine themselves and learn from their own good practices are organizations that are able to thrive under any circumstances" (Richardson, 2004, p. 18). On this view, locating and learning from good practices, what teachers do well, and then building to strength are key elements of effective inservice teacher education.

Schools committed to building on positive deviance are organized so that sharing of teaching success is easy and expected, as in learning communities. "Teachers are organized into teams that are focused on improving student achievement. The teams are information-sharing groups, discovery or inquiry groups, decision-making groups, and implementation groups" (Richardson, 2004, p. 22). Teachers work together to identify concerns, gather then analyze data, frame problems, and locate needed expertise internally. They recognize that problem solutions generated internally are more likely to endure than those imposed from without and so they first tap local practical wisdom and craft knowledge for answers that already exist. By identifying and building to strength they seek to amplify and disseminate practices that are extraordinary – positively deviant – so that they become more ordinary, part of every

day practice to the benefit of children and their learning and to teacher job satisfaction and feelings of competence. Teachers teach teachers and to this end positions are created within school faculties to support "lead learners," individuals of recognized ability who have proven themselves willing to experiment and to share their knowledge freely, to give their expertise away. Serving as school-based staff developers, in their hands, inservice teacher education takes many forms, each an extension of the desire to improve teacher practice and student learning in context and an occasion for celebrating the competence and ability of colleagues.

Conclusion

The tradition of inservice teacher education as involving one-shot, outside expert, presentations and brief workshops endures. But having failed to adequately respond to the serious and growing challenges facing teachers, a new generation of inservice activities is emerging. In addition to university-sponsored inservice education that supports teacher research there is an increasing emphasis on teachers assuming responsibility for their own development which requires policies that support changes in the context of teaching and that support and sustain teacher learning and development. As noted, among the key features of successful inservice teacher education is that teacher learning become an expected and well-supported part of every teacher's day and that teachers become increasingly invested in one-another's development as a matter of course. Clearly, good education follows improvement in the collective capacity of an entire faculty, not merely in the exceptional attainment of a very few positively deviant and highly motivated teachers who find it necessary to teach against the grain.

Biographical Note

Robert V. Bullough, Jr., is Associate Director, Center for the Improvement of Teacher Education and Schooling (CITES) and Professor of Teacher Education, Brigham Young University, Provo, Utah. He is also Emeritus Professor of Educational Studies, University of Utah. His most recent books include (with Craig Kridel) *Stories of the Eight-Year Study: Reexamining secondary education in America* (2007) and *Counternarratives: Studies of teacher education and becoming and being a teacher* (2008) both published with SUNY press. His book, *Uncertain Lives: Children of Promise, Teachers of Hope* (Teachers College Press, 2001) was selected by the Educational Research Association, Division B, as "Outstanding Book in Curriculum for 2001–2002."

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THE ROLE OF MENTORS OF PRESERVICE AND INSERVICE TEACHERS

Jo Blase

This chapter considers teacher mentoring in light of related extant research and the dictates of standards-based teaching reform. A brief review of the state of our knowledge about teacher mentoring, various perspectives on teacher mentoring, and role expectations is followed by a description of promising teacher mentoring practices, a new approach to the preparation of teacher mentors, and suggestions for further research.

Standards-Based Teaching and the Teacher Learning Reform Movement

For the past two decades, professional teaching organizations have established curriculum and teaching standards that depart from absolutist or behaviorist perspectives on knowledge, teaching, and learning because such perspectives are widely considered an important cause of unsatisfactory academic performance (Ma, 1999; National Center for Research on Teacher Learning, 1993). Educators have realized that for students to be prepared for an increasingly diverse future which relies on collaboration and sophisticated problem-solving skills, they must be taught in ways that differ from the prevailing practice. Thus, today's standards-based teaching is founded on the basic principle of students' deeper understanding of concepts and how they relate across subjects, and it provides meaningful learning based on experience and positioned within real-life contexts, active discovery, and discourse with others. In a word, new approaches to teaching are student-centered, progressivist, and constructivist.

Not surprisingly, calls for standards-based teaching reform have initiated calls for new approaches to teacher preparation and professional development (National Commission on Teaching and America's Future, 1997; National Council for Accreditation of Teacher Education, 1999). As a result, policymakers and program developers have begun to address licensing and certification standards for professional teaching as well as alignment of teacher learning with mentoring (Odell & Huling, 2000). In 1999, 27 state programs in the U.S. required the use of mentors to assist beginning teachers.

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New teaching and learning-to-teach standards and policies have provoked increased interest in defining mentoring programs and studying their effects on teaching.

Mentoring for preservice teachers (those in clinical internships prior to employment) and inservice teachers (those requiring additional training on the job) involves veteran teachers who provide support, encouragement, counseling, and guidance to less-experienced teachers (Anderson & Shannon, 1988); and it has become the primary form of teacher professional growth¹; in fact, almost 80% of beginning teachers reported having a mentor for the 1999–2000 school year (Smith & Ingersoll, 2003). Mentoring programs vary as to the number of teachers served; how mentors are chosen, prepared, assigned, and rewarded; and the purposes, character, duration, delivery, and content of the programs.

The State of Our Knowledge about Teacher Mentoring

Interest in the types and effects of mentoring programs has naturally grown since their proliferation in the 1980s; however, due to the variety of such programs and the limited empirical work available, clear conclusions about the value of mentoring cannot be drawn. Indeed, a comprehensive review of mentoring studies demonstrated that few of such studies examined the effects and outcomes of programs, most lacked controls, and few compared effects on mentored teachers with those not mentored (Ingersoll & Kralik, 2004). Nevertheless, the most rigorous studies (of about 500 studies) offer some empirical support for the assertion that mentoring programs have two major positive impacts. First, teachers working with mentors in formal induction programs are better able to manage instruction, establish routines, and keep students engaged in academic tasks (Evertson & Smithey, 2000).

Second, mentoring tends to increase teacher retention. This is significant because attrition rates among teachers are alarmingly high, with nearly half of all new teachers leaving the profession within the first 5 years of teaching; in fact, teaching is now recognized as a revolving-door profession and no number of new recruits will fill the gap created by those who leave long before retirement (Ingersoll, 2001). Specific aspects of mentoring programs that appear to be effective in reducing teacher turnover include having a mentor in the same field as the mentee; having common planning time or time to collaborate with other teachers in the same field; belonging to an external network of teachers; and, for first year teachers, engaging in group induction activities (Smith & Ingersoll, 2004). Impeding factors for mentoring programs include lack of time to meet with mentees; mentors being in other schools, subjects, or grade levels as compared to mentees; ill-prepared mentors; and mentors with narrow views of their role (Norman & Feiman-Nemser, 2005; Smith & Ingersoll, 2003; Johnson et al., 2004).

Popular Teacher Mentoring Perspectives

Teacher mentoring programs became popular in the early 1980s, with many programs focused on reduction of teacher attrition, enculturation of novice teachers, and transformation of the culture of teaching. In practice, mentors became guides who familiarized

teachers with school policies, practices, materials and methods of teaching; companions who reflected with teachers on student learning and appropriate instructional actions; and agents of change who assisted teachers in developing collaborative, shared inquiry (Feiman-Nemser & Parker, 1992). By the mid-1990s, mentoring was viewed as either a model of *transmission* in which the expert mentor transferred his/her knowledge about teaching to the teacher, or as a model of *transformation* in which mentors assisted teachers in understanding school culture and teaching in order to reform classroom instruction, school development, and community work (Cochran-Smith & Paris, 1995). The latter view of mentoring was refined by Franke and Dahlgren (1996) as having either a *taken-for-granted* perspective wherein mentors help teachers practice unquestioned teaching strategies, or a *reflective* perspective wherein mentors and teachers carefully considered and reconstructed their knowledge of teaching.

More recently, Wang and Odell (2002) have constructed three perspectives (i.e., humanistic, situated apprentice, critical constructivist) on teacher mentoring, each of which has its roots in major conceptions of learning, acknowledges the significance of emotional and psychological support, and supports standards-based teaching. Each of the three perspectives also defines teachers' problems, the goals and tasks of mentoring, the role of mentors, mentors' expertise, and mentor training differently. The humanistic perspective - designed to help teachers stay in teaching - emphasizes emotional support for teachers' problems and challenges in developing professional identities, a reduction of "reality shock" for new teachers, and a reduction of the psychological stresses of teaching. Based on the humanistic perspective on learning (Rogers, 1982), the work of mentors is similar to counseling and includes listening, identifying teachers' needs and solving problems, and developing teacher confidence. This approach to mentoring has been found to help novices adjust to teaching and to reduce teacher attrition, but it does not necessarily help teachers to critically examine their own practice or learn to teach in a way consistent with reform-based standards (Wang, 1998).

The *situated apprentice* perspective emphasizes the socio-cultural perspective on learning and assumes that knowledge emerges from its use in context; thus, teachers learn through participation in a professional community including expert technical support through mentoring, so what is learned in preparation courses is linked to actual practice. Accordingly, mentors help teachers develop practical knowledge for teaching which includes acquiring techniques and skills, knowing about resources, and understanding the context and culture of teaching (Feiman-Nemser & Remillard, 1996). Mentors' articulation of practical knowledge, their ability to demonstrate such knowledge, and their ability to coach others as they adapt to the teaching context are central to this perspective. Mentoring of this nature tends to be effective in developing teachers' management routines, classroom organization, and obtaining student cooperation in academic tasks, but it does not necessarily help teachers learn to teach in a manner consistent with reform standards (Evertson & Smithey, 2000).

The *critical constructivist* perspective on mentoring is based on helping teachers learn to transform existing teaching knowledge and practice toward emancipatory ends, that is, toward teaching for social justice (Gay, 2000). This perspective emphasizes freedom, equality, and human dignity, especially for students of low socioeconomic

status and disadvantaged minorities. Mentors are reform-minded agents of change who know how to work with teachers to examine assumptions and to study new approaches to teaching. The critical constructivist approach to mentoring does not identify standards and principles teachers should be using in evaluating their teaching; in fact, although it requires posing questions and dilemmas, this perspective fails to provide answers or to invent solutions to teaching problems as required by reformminded teaching (Cochran-Smith & Lytle, 1999).

In sum, each of the prevailing perspectives on mentoring has strengths, and yet each fails in some way to support standards-based teaching.

Role Expectations for Mentors

Research has revealed mentors' and mentees' varying expectations for the role of the mentors as they work with mentees, shape the mentoring experience, and influence teaching. For example, research has shown that preservice and beginning teachers face emotional and psychological, technical and experiential, and conceptual problems; nevertheless, mentor teachers tend to believe that their primary role is to provide technical assistance and emotional support, help with paperwork and logistical matters, provide information about procedures and policies, and offer solutions to problems (Wang & Odell, 2002). For mentees, the perceived role of the mentor is not to help mentees learn to teach, not to help them with long-term professional needs, and not to contribute directly to the process and content of learning to teach; mentees expect mentors to play a limited role in emotional and technical support rather than one aligned with standards-based instruction. In other words, both mentors' and mentees' expectations regarding the role of mentor focus narrowly on providing psychological and technical support, rather than addressing the wider role of the professional teacher. With respect to novice teachers specifically, Wang and Odell (2002) noted that mentors do not expect – indeed, are hesitant – to help novices learn standards-based teaching, uncover assumptions underlying teaching practice, develop a deep understanding of subject matter, connect knowledge to a diverse student population, understand the relationship between theoretical knowledge and practice, or practice systematic reflection and analysis.

Given the limited expectations for the role of mentors by both mentors and mentees, the emphasis in mentoring has typically been on technical and emotional supports as well as guidance about local school culture and available resources, rather than on what teachers need to learn. Clearly, mentoring practices appear to reflect the specific context and mentors' own experiences of learning to teach rather than the requirements and needs of standards-based teaching. Thus, for example, a beginning teacher who encounters difficulties with classroom management will inevitably feel frustrated and incompetent when technical and emotional support from a mentor does not solve a specific problem or match the teacher's perceptions of the problem. Predictably, the conceptual struggles teachers face are met by the mentors' reluctance to help explore assumptions about teaching and reconstruct teaching within a framework of standards-based teaching. In this way, mentors often abdicate responsibility, resign themselves to the role of friend, and leave problems unresolved; inevitably, mentees experience a sense of failure.

Promising Teacher Mentoring Practices

As noted, despite the dictates of standards-based teaching and reformers' descriptions of important conceptions of teaching and learning to teach, researchers have seldom used related principles in studying mentoring programs; thus, it is difficult to clearly identify the most useful findings about mentoring. In essence, any analysis of predominant teacher mentoring practices, however carefully constructed, will most likely fail to reveal effective ways for mentors to guide teachers toward standardsbased teaching. At this point, we can merely suggest what activities may help move mentoring programs towards the goals of standards-based teaching. To do this, we list common features from studies of specific mentoring cases in which mentoring was not limited to mere technical and emotional support, but rather was extended to support and challenge teachers to learn what they needed to learn. In effective mentoring programs, the role of mentor has been to help mentees:

- 1. *Identify beliefs and assumptions underlying one's teaching*. Mentors should identify their own beliefs and assumptions about teaching and help mentees do the same (Feiman-Nemser & Parker, 1992; Stanulis, 1994). This joint work must take into account the variety of approaches to teaching found in classroom instruction.
- 2. *Pose questions*. Mentors should help teachers take an inquiring stance to teaching. That is, mentors should become models of the practice of posing probing, critical questions about their own and others' teaching practice, and they should encourage mentees to do the same (Cochran-Smith & Lytle, 1999).
- 3. Focus on good teaching. Mentors should engage teachers in on-going dialogue centered on the principles of teaching and learning (Dewey, 1964; Wideen, Mayer-Smith, & Moon, 1998). In so doing, they will help teachers develop the ability to analyze and reconstruct their work based on constructivist assumptions about knowing, teaching, and learning.
- 4. Define the teacher's zone of proximal development in teaching and develop appropriate support among the mentor, mentee, and other teachers that will gradually support the teacher to achieve independent reflection on teaching (Wang & Paine, 2001).
- 5. Develop the mentee's subject-specific pedagogy. Mentors should analyze the mentee's knowledge of the subject matter through questioning, observing class-room instruction, reflecting with the mentee about teaching events and student learning, offering alternatives to teaching problems, and relating the mentee's instructional approach to the teaching context (Nilssen, Gudmundsdottir, & Wangsmocappelen, 1998). This will enable mentees to consider content from students' perspectives and organize for teaching accordingly.
- 6. Consider the mentee's conceptions of students as learners. Advancing one's teaching practice from traditional instruction toward standards-based and reform-minded
approaches to instruction which reflect constructivist assumptions about learning and learners is difficult. Mentors should conduct an on-going conversation with mentees about how children understand ideas, help the mentee focus on critical events and details about student learning that may have been overlooked or misinterpreted, offer relevant examples of constructivist teaching, and support the mentee in expanding his/her repertoire of constructivist teaching (Schaverien & Cosgrove, 1997).

7. Encourage the use of protocols, reflective conversations, and peer assistance among mentees and other teachers. Professional development for standards-based teaching can include using protocols to structure conversations among teachers about particular students; creating a community of teacher-learners in which teachers articulate and reflect on their assumptions about teaching as well as their ways of knowing and the contexts in which they work; and taking a constructivist view of learning by which teachers observe each other, interview students, and assist each other as they experiment with new instructional strategies (Feiman-Nemser, 2001).

In sum, the work of effective mentors goes far beyond emotional support, technical support, and merely offering suggestions and solutions; it meets the requirements of standards-based teaching by demanding that mentors treat mentees as learners who critically construct and reconstruct their teaching around students' ways of knowing and learning in specific contexts.

A New Approach to the Preparation of Teacher Mentors

To date, research on mentor preparation is also relatively undeveloped; however, a review of the assumptions, requirements, and effectiveness of the three primary mentor preparation models (Wang & Odell, 2002) reveals some understanding about mentor preparation consistent with standards-based teaching. First, the *knowledge transmission* model of mentor preparation is centered on transmitting discrete mentoring skills; it assumes that mentors can, without constant reconstruction of their own knowledge about teaching and mentoring, apply prescribed knowledge in various contexts. This typical approach to mentor preparation appears to produce few effects on mentor practice or on teachers' learning.

The *theory-and-practice connection* model of mentor preparation requires development of connections between research-based knowledge and the practice of mentoring. An assumption is that mentors actively construct and reconstruct their own knowledge about teaching and mentoring through frequent dialogue with colleague mentors, teacher educators, and staff developers. This model requires a moderate amount of time and resources and is capable of preparing many mentors. Although the effects of this mentor preparation model on teachers' learning to teach are not well documented, it has been shown that mentors prepared in using this model were more committed, sensitive, focused on student learning, and reflective with teachers (Feiman-Nemser & Parker, 1992; Wilson, McClelland, & Banaszak, 1995). The third model of mentor preparation, the *collaborative inquiry* model, requires conversations and collaborative inquiry with a community of learners (i.e., mentors, teachers, teacher educators, and staff developers, all of whom are researchers, learners, contributors, and beneficiaries) in the context of teaching, learning to teach, and mentoring. Needless to say, this model requires substantial restructuring and reallocation of time and resources, but research suggests a range of benefits of this model. For example, two studies (Feiman-Nemser & Beasley, 1997; Higgins & Cohen, 1997) found that the collaboration encouraged an inquiry stance in conversations, with participants reframing problems and probing purposes and meanings. Further, mentors gained an understanding of problems, concerns, beliefs, and practices; teachers learned how to teach in reform-minded ways; and university faculty learned about teachers' work in various contexts.

To be sure, learning to be a mentor does not occur naturally because one is a good teacher; in fact, induction into mentoring is similar to a novice teacher's journey through professional developmental stages (Zeichner & Gore, 1990). In comparative studies of American, British, and Chinese mentor teachers, researchers have reported that even if mentors' own teaching practice reflected the assumptions about knowledge, learning, and teaching as embedded in standards-based teaching reform, effective mentoring which supported teacher learning and teacher reform was not guaranteed. Mentors' actions were still influenced by context (i.e., the structure of a school's curriculum, the school's organization of teaching and mentoring, and the student population) and by mentors' beliefs about what novices need to learn, their interaction patters with teachers, and their foci in discussions with novices (Martin, 1997; Wang 2001). Thus, the design of mentor preparation programs must not only take into account ways to help mentors learn how to mentor, but also ways to interpret varying school contexts to support mentoring.

There is little doubt that learning to be a mentor can be complex and challenging. In her study of the induction of mentors in Israel, Orland (2001) described an organizing metaphor for induction to mentoring as "reading a mentoring situation" (p. 75). From a social constructivist perspective of learning, "reading a mentoring situation" involves understanding the conditions of the mentee's context; reorganizing and reinterpreting one's understanding of the dynamic nature of the mentee's practice; wearing different interpretive lenses; and consciously making efforts to overcome frustrations, feelings of inadequacy, and uncertainties. Orland compared this process to Hollway's (1984) notion of "positioning," which included themes such as: (1) transferring the mentor's assumptions as a teacher to the mentoring context; (2) comparing different mentoring contexts; (3) analyzing how systemic conditions affect the practice of mentoring; (4) developing awareness of how the mentor's own educational views influence his/her mentoring agenda; and (5) analyzing how interpersonal, organizational and professional aspects of the mentoring context operate integratively (Orland, 2001, pp. 79-80). To do such work, Orland recommends "learning conversations" among novice mentors in which they have the opportunity to reflect on and discuss their new role with an experienced mentor of mentors.

Further Research

Education reformers are demanding the kind of teaching that develops children's deep conceptual understandings, active examination of ideas, and connections between learning and life. As a result, mentors are now expected to help teachers develop a commitment and ability to enact standards-based teaching, including reflection on their teaching, development of extensive knowledge about content and effective teaching, and engagement in lifelong learning. At the same time, extant research offers but a few guidelines for mentoring programs and mentor preparation. Further investigation into substantive, programmatic, and administrative aspects of mentoring programs as well as related outcomes is warranted; however, such research should be experimental, controlled, and involve random-assignment procedures. Research could, for example, focus on questions such as:

- 1. What connections exist among mentors' beliefs and experiences, and mentoring practice and school contexts?
- 2. How does mentor selection, preparation, assignment, and reward affect teachers, teaching, and student achievement?
- 3. What connections exist among various structures for mentor preparation, mentoring practice, and learning to teach?
- 4. What are the effects of various mentoring program features for teachers with varying levels of experience?
- 5. How does participation in mentoring programs affect student learning achievement?

The New Mentoring

Teaching in new ways and substantially improving the learning opportunities for all students is challenging. Indeed, if we are to transform schools and redefine teaching in more effective ways, we must seriously address teacher learning and provide sustained and substantive professional development programs for teachers at all levels of experience. Current knowledge suggests that robust mentoring programs can have positive effects on teacher learning, teaching, and student learning. Consistent with Dewey's (1964) words about focusing on "the interaction of mind on mind, how teacher and pupils react upon each other" (p. 324), "educative" mentoring requires that mentors help teachers focus on student thinking, ideas, experiences, and learning, and work toward meaning and understanding, all of which is well beyond the mentor's parallel focus on the teacher's immediate classroom needs (organization, routine, management, resources) (Norman & Feiman-Nemser, 2005). A thoughtful mentor understands teachers as learners; and recognizes the school culture, programs, and policies in mentoring teachers. Such a mentor is a teacher of teachers who views teaching as experimental practice, shares responsibility for student learning, is guided by a vision of effective teaching and a flexible teaching repertoire, uses classroom observation data effectively, offers researchand data-based advice, engages in reflective conversations among mentees and other teachers, and carefully gauges the mentee's progress. In this form of mentoring, every school has a base of support and development for all teachers, and effective teaching is continually nurtured over time.

Biographical Note

Jo Blase is a professor of educational administration and codirector of ATLAS, The Alliance for Teaching, Leadership, and School Improvement, at the University of Georgia, and a former public school teacher, high school and middle school principal, and director of staff development. She received a PhD in educational administration, curriculum, and supervision in 1983 from the University of Colorado at Boulder, and her research has focused on instructional and transformational leadership, school reform, staff development, and principal-teacher relationships. Through work with the Beginning Principal Study National Research Team, the Georgia League of Professional Schools, and public and private school educators with whom she consults throughout the United States and abroad, she has pursued her interest in preparation for and entry to educational and instructional leadership as it relates to supervisory discourse. Professor Blase has published over 90 academic articles, chapters, and books, and she also conducts research on supervisory discourse among physicians as medical educators and consults with physicians in US hospitals and medical centers.

Note

1. Note that for inexperienced teachers and/or anyone new to a school, the term *induction* is often used to refer to such mentoring and orientation activities.

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THE LIFELONG LEARNING ISSUE: THE KNOWLEDGE BASE UNDER PROFESSIONAL DEVELOPMENT?

Bruce Joyce, Jim Wolf, and Emily Calhoun

Let's begin with the stories of Ted, Joe, and Amanda. None of them would identify themselves as professional educators. Ted is an accountant. Joe is a dentist. Amanda is a hairdressor. Ted (a practitioner of 40 years) and his primary staff in their firm in Menlo Park, California, attend a monthly 1 day seminar and a yearly 1–2-week seminar on the practice of accounting and changes in regulations about taxes. Let's average this out at about 20 days a year. Paid for by themselves, by the way, not to mention days when they could be selling services, but are in study. Joe and his staff in Saint Simons Island, Georgia, study new techniques on about 10–12 days per year. Amanda, also of Saint Simons Island, travels to Atlanta, Savannah, or Jacksonville for workshops that consume about 10 days per year, days in which she has no earnings but, rather, often pays for the service she receives.

Ted, Joe, and Amanda are fine representatives of modern continuing education in their professions. They have good help and they are not alone as they try to enhance their job-related knowledge and skills. Their occupational groups have tried to connect their practitioners to state-of the-art practice and trends. Lifelong occupational learning is routine for them.

Teaching is quite a different kettle of fish. *Formal staff development for the average practitioner is usually paid for by the organization – the school district –* but occupies only three or four days each year (see Cook, 1997, for a discussion of causes and remedies of the time problem). And, rather than an attitude of seeking the training of the types that Ted, Joe, and Amanda do, teachers, administrators, and central office personnel express considerable dissatisfaction with the content and process of the workshops that are offered in those few days. For 20 years, authorities in the field have virtually trashed the most common practices – the sets of brief workshops, and, by implication, the people who plan the smorgasbords of workshops, but the time allotment remains unchanged and "What" is so peculiar is that, in education, the employer pays for development opportunities for most practitioners but is castigated for what it does, not for the small amount of time paid for, but for how teachers, administrators, and central office personnel – the people who plan the workshops – feel about it and its effect on

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practice. For Ted, Joe, and Amanda, implementation is their responsibility (and all three work in view of colleagues and with them as they try to use new procedures in their workplaces). For the educators, the content and process of the staff development provisions are criticized for content and process and because, one, they don't like what they plan for themselves, and two, because they feel that there are little effects in the workplace.

Given the din of criticism, if we believe the organizers and participants in formal staff development, much of it does not achieve limited goals, let alone draw practitioners toward extensive and regular learning.

Staff development has become a tough business: Little time, many demands. Its context includes a government that insists that only its version of tough-minded research can justify practice, scholars who believe that the traditional paradigms of practice and research are obsolete, teachers' organizations that have gone so far as to bargain to allow folks to stay in their classrooms and study alone rather than attend the planned events, even ones generated with their colleagues in the school.

In spite of the discontent, a good deal is written about staff development. The resulting literature provides our data and, although there are distressing signs, the picture is not as grim as often advertised.

Beginning a Review

On the surface, the request to make a synthesis of research on staff/professional development would appear to lead to a relatively straightforward effort to search reports of research on staff development and professional development, organize the reports, and report the results.

Au contraire. Many types of activity and some very substantial initiatives make their home under the terms, *staff* and *professional development*, and many of those are not called staff development as such. *There is no single entity or even a category of thing that can be studied as staff development*. Rather, there are several kinds of arrangements designed for various purposes, although they have in common the goal of enhancing the growth of education professionals. That common goal became our general focus: *organizational arrangements designed to enhance the growth of education professionals*. That idea provides an umbrella for a wide variety of programs and for the equally wide variety of theoretical positions and ideologies that spawn them. Also, searching for evaluations conducted to test the effectiveness of programs conducted under their banner is not unlike the proverbial hunt for the needle in the haystack. In this case, the haystack is the considerable number of articles and books and technical reports that have appeared on staff development. The needle is the tiny collection of studies that have produced knowledge that can be relied on as we think about how to make professional development vibrant and effective.

The body of research and evaluation is puny. Research on theory or assumptions is almost nonexistent. Only a handful of programmatic researchers inhabit margins of the field. But, the questions that need to be addressed are complex and there is some urgency to address them. Let's begin by trying to sort out the types of work that legitimately belong under the terms, staff and professional development. As we do so, we can confidently forecast that the product here will not be a meta-analysis that reduces a large empirical literature to a single number. There is no large body of empirical literature to pull together in the meta-analytic fashion. However, there is a large amount of information in the existing literatures, information that mostly tells us about the nature of the field. And, the rhetoric on staff development contains many perspectives and a *pot pourri* of unreconciled opinions that can inform us as we try to get conceptual control over staff development and how it might be improved, which is our objective here.

Searching for Staff Development and Finding Varieties

The first stage of our research was to locate the descriptions of staff development in the current literature and mounted in school districts and try to document the purposes and assumptions underlying them.

We imposed the more particular definition of staff/professional development as formal provisions by organizations of ways of helping teachers enhance their knowledge and competence. Formal, as used here, means the deliberate arrangement of organizational processes and structures to facilitate the development of competence of teachers and school-level administrators. Clearly, there are myriad ways that the four million plus teachers and administrators can generate growth opportunities on their own and there can be adventitious events that can have a large impact, even being career-changing (In fact, someone should study those). However, our focus here is on the opportunities that are deliberately created by policymakers, including the opportunity for self-directed growth.

We begin by reading the journals and magazines in the field of education, published in the last 40 years, that deal at least occasionally with staff development. Before the early 1970s the term "Inservice Teacher Education" was used to refer to organizational arrangements and higher education courses. The publications included ones put out by the national organizations that deal with staff development, school improvement, and leadership, ones that pertain to the curriculum areas such as reading, science, and so forth, and ones oriented toward knowledge production as such – particularly the three most prominent AERA organs. In addition, handbooks, such as the current handbook on the study of teaching and encyclopedias, such as the publication by Alkin (1992), contain relevant material.

The recent report on research on teacher education is revealing (Cochran-Smith & Zeichner, 2005), partly because it does not even include a chapter on the continuing education of teachers and partly because it deals with research and evaluation in the most adjacent sub-fields of education rather than the core curriculum of teacher education. The programs of the national organizations, particularly The Association of Supervision and Curriculum Development (ASCD, 2005a, 2005b) and The National Council for Staff Development (NCSD, 2001, 2004a, 2004b), and the International Reading Association (IRA), both follow and set trends in types of staff development and school improvement. And, of course, with the No Child Left Behind initiative and Reading First, the government entered practice in a shockingly heavy-handed

way. There are no hard data on the impact of government policy on staff development, but we think that many elementary school teachers are taking brief workshops on phonemic awareness and phonics or are being "inserviced" by the staff of such as *Open Court*. Under No Child Left Behind, the Department of Education funded several centers to lead school personnel to optimal practices. There has been a cloud over those centers because some staff appear to have financial ties to publishers of instructional materials and apparently direct districts toward those publishers and consultants compatible with their approaches. Effectively these ties, if true, make an official connection between the government and commercial approaches to literacy compatible with the position of the government presented by the National Panel Report (see Manzo, 2005a, 2005b, 2005c; Toppo, 2005a, 2005b). In states as important as California, consultants have been told, point blank, that they would not be able to provide service unless they embraced certain approaches to phonics as the primary method for teaching reading.

We believe that fostering life-long learning is best accomplished through inquiryoriented approaches rather than directive, closed-minded approaches. The government approaches are counter to the life-giving inquiry-oriented approaches.

Finding the literature is easier than finding surveys of current practice. We are fortunate to have been connected recently with a number of current studies of staff development practices, including comprehensive studies in a large and middle-sized state and a study of the ethos in school districts containing some very high and very low achieving schools, controlling for the socioeconomic status of the communities they serve. These connections have provided us with a considerable amount of information about current practices and their effects. And we have contacted a number of state departments of education and officials of large and small school districts for information regarding specific issues. We are going to find that many teachers are learning a lot, but whether that leads to long-term learning will be at issue.

The Nature of the Literatures

There are two distinctly different types of literatures. One is by professors and staffers of regional laboratories such as WestEd and large scale research, development, and consultatory organizations such as AIR, RAND, and ETS, writing in yearbooks, encyclopedias, and the journals and other publications of The American Educational Research Association (AERA). The other, largely in the magazines of the major organizations, is by practitioner-consultants who describe something they or their school districts – or schools – have done and may provide some assessment data.

Neither literature is a set of reports of fractional-factorial experimental studies where various types of staff development can be precisely compared and classic meta-analyses can be conducted. In large part, the articles describe practices and present arguments for them. Much of the literature that contains data is in the form of evaluations of various kinds of staff development programs.

Not only are there few studies among the hundreds of articles and books on the various types of staff development, but much of the prose is decidedly unscientific

and much of the writing is laced with unsubstantiated claims. Frequently, claims of being research-based or evidence-based turn out to mean a tenuous connection to a line of research or a research-backed theory. For example, a description of a workshop in tutoring may include the claim that tutoring is backed by research (true), but the mode of tutoring promoted in the workshop may be far from the modes used when the research was conducted. The very loose use of the term, "research-based," is confounding. In a journal as respected as Teachers College Record, a review of a book on mentoring states that the author "has done an excellent job of pulling together the research" (Tushnet, 2005, p. 2531) when the author has, in fact, done no such thing and did not pretend to. The book is a thorough handbook and gives good advice on a topic that is backed by virtually no research. We fervently wish that writers could sav things like, "There is a history of research on some dimensions of the procedure we propose," or "Our focus here is on one dimension of a comprehensive reading program, one where there have been several studies indicating how it can affect student learning, and we...." and avoid categorical statements that are high-sounding but misleading. To promote life-long learning, the literature can use a good housecleaning and instigation of a more professional language and style.

Some common rhetorical structures lead the reader persuasively rather than logically or scientifically. A favorite device in articles and books in staff development is to hold up what is described as the current practice of offering smorgasbords of brief workshops as worthless and obsolete and then advocate an alternative. Much of the literature implies that many current policymakers are incompetently offering truly dreadful workshops that could not possibly enhance teachers and administrators and offers sunny visions of happy and productive teachers brought together by the profferred alternative. We make no brief for the short workshops, but the situation is peculiar – that the work of most of the experienced staff development organizers is so strongly objected to – they must have a reason for doing what they are castigated for doing.

The National Staff Development Council (NSDC), the organization that represents the field in the United States, uses the "trash current practice" structure in advertisements that it currently runs in the magazines of other professional organizations. In the text of one, staff development is depicted as "irrelevant, unfocused, a complete waste of time." To fix this, call (the number of the organization) (PDK, 2004).

A second ad suggests that "staff development is no longer about getting CE credits. It's about getting results." And, on process, it claims that "daily or weekly study groups (are) replacing inservice days." And, "Learning that's based on student data rather than on knee-jerk responses to the latest theory *du jour*" (cover ad in the February, 2005 *Phi Delta Kappan*, Vol. 86, No. 6). And that is from an organization whose publications and meetings generate the *du jour* atmosphere around the latest fads – "study groups" being one of them.

The second advertisement is wonderfully prototypic in that it puts down inservice days in general, credits as incentives, and, amazingly, suggests that the organizations (school districts and schools) have somehow allotted enough staff development time that "daily or weekly" study groups could be organized. Rather, as indicated as we began and which constrains every effort to improve staff development, educational organizations provide somewhere between three and four days (or day-equivalents, as a set of 2-h blocks equivalent to one or more 6–8 h days) per year rather than the time for daily or weekly meetings. The provision of time is a major factor in what kinds of staff/professional development can be provided and what they can be hoped to achieve. If you have to slice and dice only three or four days to accommodate the competing desires of several hundred teachers, you may well end up with a bunch of short workshops. All types of staff development are seriously constrained by the lack of significant time dedicated to instigating the learning of educators. Despite its condemnation of current practice, NSDC provides a monthly column in its house organ that provides advice on how to conduct brief presentations. The column and ancillary publications offer common sense advice but do not cite research and cannot, because there is none. However, we believe that well-planned brief workshops can, in fact, generate long-term interest. We have generated workshops on models of teaching like synectics that few participants have heard of previously but have brought them into serious long-term study of the new (to them) model.

An anomaly in the literature is that there is no research directed at how to make the "brief workshops" more effective despite their dominance of practice. Quite possibly, short workshops might be meaningful to adult learners on certain types of topics and using certain types of procedures. A recent summary by the National Center for Educational Statistics indicated that teachers' views of the impact on their behavior was greater for workshops longer than 8h – possibly the very short workshop might not be so bad if it were a somewhat longer workshop (NCES: The Condition of Education, (2002): Indicator 33: Participation in Professional Development). However, most teachers did not feel that the longer workshops improved their teaching skills "a lot." On the other hand, "a lot" may be too high an aspiration for something that occupies only 16 or 24h. And, as we will see below, not every workshop contains content relevant to practice, which might affect the results of the survey. More study needs to be done on how to design workshops to improve practices. A set of modest-sized improved practices might add up to significant improvements.

When we and our colleagues began our early studies of staff development, very few long workshops made a difference to behavior in the classroom. That picture changed, as we will see later, as the outcome of an intensive program of research (For a summary, see Joyce & Showers, 2002). Possibly short workshops might be shaped to have modest but significant effects in certain areas. The organizers are educators, the workshop providers are educators, and the participants are educators. Surely all these educators could study how to improve a practice that brings them all together in a common cause.

The rhetorical problems have followed technology into the area. A new event in staff development is the provision of mediated courses using the computer and content on video (tapes, streaming, and such). National Public Broadcasting (NPB) has entered that arena with the offering of more than 80 courses – the national-level consulting agencies are present also, as is ASCD, with its own array of courses. Incidentally, NPB and ASCD offer both Continuing Education (CE) units and university credits. Both organizations offer courses based on the most common short-workshop formats, and usually developed by the same "sages on the stages" that are deprecated, but the mediated format has obvious attractions. The programs of offerings claim to

be research-based (what that can mean we will discuss later) and, as do many of the articles and books presenting the various approaches to staff development, they claim considerable effects. Consider the following from an advertisement:

a study by researchers from Hezel Associates and the Educational Alliance at Brown University showed that schools in which at least ten percent of the teachers participated in PBS TeacherLine courses had statistically significant achievement gains, in comparison with schools that did not use PBS TeacherLine. (PBS Professional Development for Educators)

Imagine that! If three teachers in a school staffed by 30 teachers take the distance courses, achievement in the entire school rises? Although the PBS claim is particularly egregious, it is common that advocates of various approaches to staff development make claims of a remarkable magnitude without a smidge of evidence from either evaluations or research, although the rhetoric would lead one to believe that it exists. In this case, our conversations with Hezel and Brown staff resulted in their claim *that the results of their studies could not be released at this time*. Sad, but true. PBS can tell the world that their practice is based on research they have commissioned, but the research remains a secret.

If learning a complex model of teaching online appears a bit outlandish, consider the offerings of the Global Equine Academy (2004), which promises to teach you to ride a horse (you have to have one in residence) and even learn some of the skills of dressage. In the field of teaching horsemanship, no evidence base is required, but we had a good conversation with them about their successes and, to their credit, problems – hold on to the pommel, kiddo!

And, if you happen to own a tank, you might try the Army Captain's Career Course, for which research evidence *is* available (Leonard et al., 2001).

There is no reason that teachers and other educators cannot develop longer-term learning with the help of distance means.

Where advertisements are concerned, the need for editorial probity is a real concern for the national organizations. In the important *Reading Teacher* an organization called Recorded Books makes the following statement in a full-page ad. "Research shows you can *improve reading skills by 34%* with recorded books." (p. 621, Vol. 58, #7). No citation, of course. We believe that the editors of the important journals have the right – and authority – to discipline advertisements. On the opposite page to the Recorded Books advertisement, SRA-McGraw-Hill promises to be the "one source" you will need to solve your reading problems. If your comprehension skills are working well, you won't be taken in.

The use of the "trash and suggest" structure has lead to a serious problem in interpreting the literature. First, the structure sets up an argument that justifies the new practice on the basis that the common practice is bad. Does "bad" mean "unpopular?" Is "bad" relative, that is, compared to what? That one thing may actually be bad does not make the proposed alternative good. Second, the rhetoric suggests that the school district planners organize the workshops without attention to teachers' needs. In fact, the arrays of short workshops (they do exist) are usually generated through surveys of teachers' perceptions of their needs. What would happen were teachers to do the organizing? Twenty five years ago, the federal government funded a set of "teacher run" teacher centers where teachers controlled the decision-making process and were funded to provide offerings to teachers within a region. An evaluation indicated that the teacher-run centers generated almost exactly the same offerings that the school districts had made and used the same processes. Changing the locus of decision making from the school districts to the teachers did not change the offerings.

Also, when we focus on whether any given staff development event or series of events has results either in changed practice or student behavior as a consequence, we are almost inevitably led to ask whether the event has content that is implementable or could reasonably be expected to influence student behavior. In the study of the staff development practices in a large state, we discovered that about 90% of the events did not contain content that could be used in classroom practice, let alone could have influenced student behavior (Joyce & Belitzky, 2000). Seashore/Louis and Miles had similar findings in their extensive study of school improvement in urban schools (Seashore/Louis & Miles, 1990). No wonder there are complaints that many workshops do not have immediate applications in the workplace - in many settings, most do not and were not designed for that purpose. For example, a workshop to acquaint teachers with regulations about how to develop Individual Education Plans (IEP's) may have considerable utility, but does not help people develop skills in the Models of Teaching that might be needed to implement them. The finding was virtually identical to the picture that emerged 30 years ago from the California Study of Staff Development (Joyce & Showers, 2002). At that time in California, grants to 3,600 schools (of as much as \$200,000 for large schools) did not result in more practical content, although the staffs of the schools selected the content for their school-site workshops. The conundrum is that surveys of teachers result in the content of committees of teachers who decide on it, and that content is sometimes not relevant to the teaching process except indirectly. (Stress management is an example. Regulations about testing practices and report cards are others.) Then, the events are criticized because they are not directly relevant to classroom practice.

In its position paper on distance learning, NSDC continues to use the condemn/exhort structure to push what it calls "E-Learning." In this case it ignores the smorgasbords of offerings that have resulted from the "needs surveys" it once promulgated. "Most (current staff development) occurs in formal structures where one-size fits all." (In fact, the smorgasbords are designed with many types of content that fit the expressed needs of teachers.) However, in E-Learning, "the learning experiences are customizable and support 'just-in-time' learning (Sparks, 2004, Foreword)." In fact, the PBS and ASCD computer-based courses are on similar topics as the offerings at the institutes sponsored by ASCD and NSDC, and, in fact, most of the topics were offered at the time of the California study, 30 years ago.

Writing on the same topic, the executive director of NSDC raises a cautionary tone and simultaneously slaps at universities and school improvement practices.

I also fear that electronic learning will provide an easily-administered, high-tech excuse for the not-so-good-old-days in which the primary form of professional

learning was university courses, which too often acted as a centrifugal force that tossed teachers and administrators in many directions as they completed their degree requirements. Anything that adds to the fragmentation and incoherence that continues to plague current school improvement efforts cries for elimination, not celebration. (Foreword to E-Learning for Educators)

Oddly, NSDC does not appear to know that the bachelor and masters degree requirements were mostly standardized around certification requirements and conveyed core knowledge or practice rather than operating as a "centrifugal force." And, thus far, "E" offerings follow the same content as in the NSDC annual conference and institutes and look like units in the university offerings.

Condemning is an entirely different proposition from developing better practice. Condemning all the well-meaning organizers of current workshops does not make any sense, either. If the cadre of organizers is populated by incompetents, then who will do the new and better things? Or would they re-educate the current cadre of organizers? Or what?

"Top down" versus "bottom up" is a continuing theme in both literatures, generally with the implication that client control is superior and with little recognition of the extent to which the client has been involved in past decision-making. The literature is slightly neurotic, in many cases combining a forceful advocacy of educational improvement with themes that question the legitimacy of the organizational leaders. Some of the articles advocating study groups or learning communities barely acknowledge that practitioners are employees of organizations that have also employed leaders to, well, lead.

In the case of teacher centers, "bottom-up" decision-making did not trump "top-down" decision-making. School officials and teachers may be more alike than some would have us believe.

Thus, the national organizations hold up the smorgasbord of short workshops to ridicule and promote a collegial self-education model. Simultaneously, the academics are moving away from training models and taking a situationistic perspective. Long-term staff development built around curricular and instructional models are rarely referenced except by the people who conduct and research them.

These trends make pulling together the literature tricky, to say the least. Nonetheless, a number of types of staff development surface and provide a structure from which we can try to pull together the literature. We focus on eight of them.

States of Growth: Individual Differences to the Rescue

Before looking at some of the types of staff development that are available, we need to pay attention to differences in teachers that affect life-long learning. For the last 30 years we and our colleagues have been studying what we call the "states of growth" of teachers and administrators. We published the first studies in the 1970s and 80s (see Joyce, McKibbin, & Bush, 1983) and the most recent and best current research is in Joyce and Showers (2002). The data source are teachers' and administrators' accounts of their utilization of formal staff development offerings, their interaction with colleagues in their work situations, and their activities in their personal lives.

The early studies were conducted with samples of the faculties of 80 schools that were randomly selected as part of the California Staff Development program. The more recent studies are conducted as part of extensive school improvement programs where staff development is generated to help teachers implement new curricular and instructional patterns in the literacy area.

Over the years, there have been three consistent findings. One is that these educators behave similarly in their approach to professional opportunities. Those who are most active in their professional domains are also the most active in their private lives. Second is that both personal and professional friends affect activity and attitude in the professional and personal dimensions. Third is that positive and negative attitudes are correlated – the people who are most positive in the professional domain are also the most positive in their pursuits in the personal domain.

We have developed the following crude categories to describe the states of growth of the teachers and administrators:

- · Gourmet omnivores
- Active consumers
- Passive consumers
- Reticent consumers

The term "consumer" is used because of our stance that the culture that surrounds us is there to facilitate our growth and, if we use it wisely, there is heaps to be learned.

Gourmet omnivores approach the world as their great smorgasbord opportunity, but they are not gullible – they pick and choose what they believe will most benefit them and then exploit the chosen opportunities vigorously. They will go to considerable trouble to find a setting, a workshop, a course, from which they can profit.

In colleagueship they seek out other active people. They may get together with some others and, lo and behold, a charter school springs into being. However, they do not necessarily take leadership positions. Observing principals who appear to be bogged down in paper and discipline, they often shun that type of leadership work. Here are a couple of examples of omnivore lives.

Ralph is a principal of a K-8 school. Everybody is learning new strategies for teaching literacy and the school has become a studio for making video demonstrations. In his private life, he maintains a license to fly private planes. He has learned the skills and knowledge to build the summer cabin where he and Lori gather with their five nearly grown children. She has learned several new models of teaching to the point where she has introduced several hundred of the district teachers to them and made a set of demonstration videos which are used in a number of settings. She reads both children's literature and adult novels.

Lori and Ralph energize each other and friends and colleagues.

Their close colleague, Mary, has an enormous collection of books for adolescents and has written and published a half dozen of them.

Omnivores feeding omnivores constitute about 10% by our reckoning.

Active consumers (about 20% of the total) are almost as active, but display less initiative. In the company of several omnivores, they behave similarly and tend to participate happily in activities generated by the others, but they are selective; they don't follow blindly. Both categories have a positive effect on both professional and personal activities. They make what they choose, whether a community theater or a tennis club, a more positive place to be.

If the people who state that all short workshops are in trouble they should spend more time interviewing these folks and – attending workshops run by them. This 30% can generate and offer a tremendous number of offerings for colleagues. And – they model a high state of learning.

Passive consumers are the salt of the earth in education. On the whole, they are happy with schools as they are. They rarely protest or push for change. They sit through deadly faculty meetings. They are peaceable folks. And, they participate in workplaces and attend meetings developed by others. Organized into study groups they will look to others for leadership. And, they are about half of the population of teachers, administrators, and central office personnel. And, passive central office personnel are much more likely to promote passive folks into the principalship than they are those troublesome omnivores and active consumers.

In general, passive consumers are seriously influenced by their cohorts in school and at home. One on a study team of omnivores and active consumers, and they may be bemused, but will engage in a good many activities that they would otherwise not do. In private life, a passive consumer who happened to marry an omnivore will do all sorts of things that they would not have done had they gotten together with another passive consumer.

The reticent folks have a far more important influence on the impressions that observers get about teachers' beliefs about the quality of both the workplace and formal staff development offerings. To hear them talk, both leadership and workshops are almost perverse – neither one worth that much.

If you offer a solid workshop – conceptual and practical – and you have the array of states of growth we have been talking about, you will get a distribution of responses. The omnivores and active consumers will be cheerful and positive and may offer you advice about how to do it better.

The passive consumers will thank you and leave without any intention of doing anything about it - you have to organize the follow-up. The reticent folks will growl.

Now, as we look at the types of staff development, let us think about how the folks in different states of growth might respond to each of them.

Types of Staff Development

While reviewing the literature, we focused on organizational arrangements in terms of content, the nature of process, the providers of service, logistical arrangements (such as time and interfaces with colleagues), and provisions for determining effects and making revisions to increase productivity. The following seven options are most prominent. For the time being, we will omit considering the most common general mode – smorgasbords of brief workshops over a wide variety of subject areas.

- 1. Curriculum and instructional improvement at a general level as the literacy curriculum, where curricula and models of teaching are developed and disseminated.
- 2. Workshops on generic instructional techniques.

Examples are types of questioning, classroom management devices, and the like (see Marzano et al., 1987). They are less broad than either full-blown models of teaching or curricular strands in the core subject areas (see Joyce, Weil, & Calhoun, 2009). They make up a fairly large proportion of the brief workshops that are directly relevant to practice, making them quite different from the workshops on content that are only indirectly related to practice.

- 3. Personal/professional services, as mentoring and team teaching.
- 4. Structured instructional improvement through supervision, where ideas about instruction are disseminated by supervisors or mentors or peer interchange.
- 5. Instructional improvement disseminated by teachers to, especially, novices, but also other experienced teachers mentoring programs are the chief example, but those dealing with specific curriculum areas are often called "coaching" programs, as the much promoted practice of connecting literacy coaches to schools.
- 6. Open-ended local learning community activity where school faculties or teams come together to assess their situation and make decisions about needed improvements.
- 7. Action research disciplined inquiry by faculties who study the curriculum, instruction, and social climate of their schools and make decisions about school improvement. Action research can result from the open-ended learning community activity, although there are few reports on occasions where that transition happened.
- 8. Individual inquiry individuals are supported with time and money in their personal study efforts.

In addition, two others are ways of delivering service.

Distance learning – chiefly offerings for individuals – most currently include Continuing Education (CE) or college credit.

Alternative avenues to preservice study – on the rise today – often called internship programs, the novice teacher studies while working part or full time as a practitioner. One fourth of new California teachers enter through this avenue and provide service during their preservice training.

The eight are not orthogonal categories – their processes and purposes overlap. For example, direct personal service can generate curriculum implementation. Workshops can include personal service or formal curriculum improvement at a general level. When curricula and models of teaching are developed and disseminated, learning communities can be developed. All eight are naturally-occurring types of staff development and all are evaluatable and are driven by assumptions that can be tested. Let's amplify them a bit and see what we can find in the way of a knowledge base that allows us to estimate their effectiveness and the validity of their assumptions. First, however, we need to deal with studies that have resulted in knowledge that can be applied across the field.

Squeezing the Base for Generic Knowledge

As we indicated earlier, there are few studies of inservice teacher learning – or preservice education, for that matter – especially given the vital importance of the field. Quite a bit of what exists is in the form of evaluations of projects in school districts – we do not deprecate these – in fact, we do them. The field has not attracted programmatic researchers who address general topics such as the nature of the learning capability of teachers and the kinds of environments that facilitate their learning of knowledge, skill, curricula, and models of teaching that are new to them. But there is some evidence about the capacity of teachers and how to design environments that help them grow. This information potentially applies to all the types of staff development that appear in the literature.

A Brief Note About the Demography of Teachers

When studying schools and schooling, or probably any other enterprise, it is worthwhile to find out some basic data about the population, in this case teachers, without having hypotheses about how the findings will affect other aspects of the study.

Judging from data from the annual *Condition of Education* documents and a variety of other sources, we estimate that, currently, there are between 48 and 50 million students in our 100,000 or so schools. There are about 3.3–3.5 million teachers, or about one for every 14 students. About 0.57 million aides and paraprofessionals also work in our schools. If we add them to the teaching force, about 3.9 million adults work with our children, or about one for every 12 enrolled students. About another 400,000 professional specialists (from nurses to psychologists) provide support. Altogether, about 4.3 million adults, or about 1 per 11 students. About 100,000 principals and 50,000 assistant principals are also present. Staff development needs to serve this enormous number of education professionals – over three percent of all employed workers in the United States. As to age, the average newly certified teacher is 29 years old – the median is 26. People take longer getting through college and selecting vocations than they once did.

In the course of several studies we and our colleagues have tried to learn where the teachers grew up and where they went to college. In each case where we have asked those questions – several districts each in Florida, Georgia, Iowa, and California, and a couple in Alberta and Saskatchewan, the picture has been similar and fits the profile that emerged in Lortie's extensive (1975) study. About three quarters of the teachers work near where they grew up and went to college in a nearby university. In a case study in a large Florida metropolitan area, a number of the teachers and principals in several schools were working in schools they had attended as children. This condition might have implications for staff development.

Imagine that a student attends the local school and then attends the local college, selecting education as a major. The odds are that our teacher candidate was satisfied with schooling as he/she experienced it. So much, in fact, that he/she selects that local school as the site for student teaching (most teacher education programs make this possible, even desirable, because the candidate can live at home during student teaching). The cooperating teacher may be the candidate's favorite teacher when a child. Then, the local school hires the novice teacher and assigns one of his/her former teachers as a mentor.

How is this person likely to respond to staff development that is offered on the argument that teaching and curriculum need to be improved? Or to the rhetoric that we are *a nation at risk* because of the condition of instruction in our schools. Our new teacher may have come into education *because* he/she is comfortable with current practice experienced as a K-12 student, as a college student, and as a novice teacher. He/she may be very proud of those schools and teachers. And, after all, these schools are connected with the community of origin. Folks like this are surprised when they find that staff development and school improvement efforts are designed on the premise that schooling as practiced can be improved. Contrary to popular opinion, new teachers can be as resistant to innovative practice as their more experienced colleagues (Joyce & Showers, 2002, Chap. 8).

Add to this the finding by Vance and Schlecty (1982) that the candidate is ten times more likely to be in the bottom fifth, academically, of his/her college class than to be in the top fifth. Some of the practices in curriculum-change staff development are oriented toward academic inquiry, the BSCS program being an example (see Loucks-Horsley, 2003). These highly-intellectual approaches to teaching may be more amenable to the higher-achieving teacher.

However, let's not undersell our new teacher's learning capability.

Can teachers learn an expanded repertoire of teaching strategies to the point where student learning results? We and our colleagues over 40 years are entangled in research on that question. In the 1960s and 1970s there was serious concern about whether teacher candidates could learn a repertoire of models of teaching, partly because of the belief that teaching was an emanation of personality and values: Teachers were seen to act out their personalities and educational philosophies. And, teachers were then and are frequently described now as disinterested in general questions of learning and interested only in what they can use "Monday morning". (See descriptions of "Adult Learning Theory" in Knowles, 1978.) In a long series of studies (see Joyce, Peck, & Brown, 1981) the important general finding was that teacher candidates have substantial learning capability and the conceptual understanding that teaching strategies that are developed from quite a variety of stances can be useful to them as they master the multiple demands of the classroom. Conceptual level was a larger factor than specific beliefs, as the more abstract teacher candidates mastered new (to them) models of teaching more easily and developed executive control more rapidly.

The findings were a testament to the learning capability of novice teachers. Later studies asked the same questions with respect to experienced teachers and generated similar findings (Baker & Showers, 1984; Showers, 1984). The findings contradicted the position often found in the literature that teachers are tied to the immediate demands

of their job and are reluctant to learn new teaching strategies unless they have an immediate felt need for them. There is no evidence that teachers are so narrow, although they are understandably concerned that staff development relates to their work. We are prepared to assert that teachers have a general capacity broader than their pragmatic concerns.

Beginning with a review of studies that focused on helping teachers to expand their repertoire of teaching strategies, Joyce & Showers (2002) developed the theory that teachers learned when a combination of elements were used in the design of the staff development environment. In learning a new practice, the following elements appeared necessary to the development of adequate knowledge and skill: The study of the theory undergirding the approach; demonstrations, particularly sets of videotaped teaching episodes; and practice in making plans to adapt the new practice in their classroom. A series of studies confirmed that those elements resulted in the development of skill, but also that only a few teachers continued to use the new elements of repertoire. Experimentation with "peer coaching," where teachers were formed into partnerships who reflected on their experience and encouraged one another, was positive, increasing the use of the new practices from 5% or 10% to 80–90% or more. Apparently the period of consolidation of a skill, including how to assess student response, is a critical one as matters now stand. And, in relation to the breadth of teacher capacity, teachers demonstrated that they can help their colleagues learn a spectrum of teaching strategies new to themselves and those colleagues. We believe that teachers can master a considerable range of teaching strategies, that training needs to be designed to generate adequate levels of skill, and that collegial peer coaching can bring new content into the repertoire (see Joyce & Showers, 2002, for a review of the development of the theory and relevant studies).

Messages About Teachers from Curriculum Studies

Studies of curriculum implementation offer not only a test of the type of staff development that focuses on curriculum implementation – see the next section of this report – but of teacher learning capacity as well. The question of whether teachers can master new curricular patterns has been dealt with on a very large scale by the developers and evaluators of Success for All (Slavin & Madden, 2001, 2005) and Reading Recovery (Swartz & Klein, 1997). In both cases, thousands of teachers have been able to implement curricula involving new practices and considerable numbers of students have learned to read better as a result. Both of these efforts have employed formal training methods including some of the elements described above and they have organized teachers into self-help groups to facilitate implementation.

A recent set of studies have found that the use of the staff development elements described above have resulted in the implementation of an innovative curriculum for struggling readers from grades four to ten, in several quite different school districts. In each setting the effort generated large and positive effects for hundreds of students (see Joyce, Calhoun, & Hrycauk, 2001; Joyce, Calhoun, Jutras, & Newllove, 2006; Joyce, Hrycauk, Calhoun, & Hrycauk, 2006). Similarly, the same general methods resulted in the implementation of a new curriculum for teaching kindergarten students to read

with positive results that persisted through the elementary school years. In both cases the teachers needed to expand their reportoire substantially and the student learning is in areas of need that have defied previous curriculum development efforts to address those areas.

Altogether, the findings from the studies that give us information about the capacity of teachers to learn new teaching strategies and curricula are positive. Although alternative sets of elements and "follow up" could be developed and achieve substantial effects, current knowledge indicates that nearly all teachers can expand their repertoires and, provided the new repertoire will generate new types or degrees of student learning, achieve the level of implementation where students will benefit accordingly.

Governance as a Possible Factor

As we indicated earlier, many writers about staff development are supportive of governance styles where teachers design their staff development or have considerable influence on content and design ("bottom-up" modes). Those writers are wary of designs made by local or state officials ("top-down" modes). As far as we know, only one study made a direct comparison of governance modes and we were principals in the publication of the results. The findings were interesting. The study was possible because all the elementary school teachers experienced staff development from three governance modes simultaneously over a 2-year period. One was a district-wide initiative in the language arts. Teachers were involved in the selection of the initiative, but it was implemented across the district and staff development was provided to all teachers on a regular basis. The second was school-wide action research. Each school was provided with a budget for self-study, and leadership teams made up of principals and teachers were responsible for leading the effort, which was to involve all the teachers at each school. Third was the support of teachers as individuals with stipends of \$1,000 apiece that they could use to further their personal study. They submitted a plan to a committee of teachers - all plans were approved. Student learning was studied directly in the course of the district initiative and several schools studied student learning. In addition, the teachers were interviewed to determine their opinions of the worthwhileness of each initiative. Most of them favored the district initiative – the most "top-down" of the three. Second most esteemed was the schoolwide action research initiative. Least popular and least effective from their perspective was the support of the teachers as individuals! We wish that there were more studies of governance, particularly because the literature makes so much of locus of control, but more important because the real issue may be in how to make the several types of governance pay off for various purposes. Possibly governance structures for district-wide initiatives may be quite different than structures to support teachers as individuals and those may be different from the structures that support school-based efforts effectively.

The Study of High- and Low-Achieving Schools – Information About Staff Development

Two studies examined staff development in exceptionally high and low achieving schools in the state of Georgia, including the ethos in the districts where those unusual schools

operate. The study was possible because, through the 1990s the state maintained a thorough data base on student learning. The researchers selected 20 elementary, 20 middle, and 20 high schools, half of which had exceptionally high achievement for 3 years running and half of which had very low achievement for the same 3 years. For example, in the upper Socioeconomic Status (SES) bracket of elementary schools, 91% of the students in the high achieving schools reached the state goals on the tests compared to 61% of the students in the lower-achieving, upper SES bracket. In two schools matched for size in the lower SES bracket, the top school was in the highest 20% for all schools in the state and the lower was in the bottom 20% for all schools in its SES cluster.

A team of researchers visited the schools and conducted interviews with teachers, principals, and district officials. The interviewers were unaware of the achievement status of the schools.

The schools had roughly equal resources for staff development, including for released time, and had the same pools of district and regional providers of staff development to draw on. However, in the higher achieving schools, governance was deeper and more integrative, the more effective training models were employed, principals and central office personnel gave more support, including following up training events. More of the content was transferred into the classrooms. Interestingly, there was both more inclusiveness in governance **and** the administrators both pushed and pulled more. The top-down/bottom-up dichotomy does not fit these findings.

Essentially, the higher-achieving schools had more unified social systems and took essentially the same potential offerings and used them in a more energetic and positive way.

The Iowa School Boards Association piggybacked on the Georgia data base and, visiting a set of school districts selected because they housed exceptionally high and low achieving schools, studied the views of the superintendents, board members, district and school administrators, and teachers. They concluded that certain beliefs about students and parents pervaded the ethos of the districts. In those that housed the high-achieving schools, the attitude toward students and parents was positive and optimistic – the term "elevating" was coined. Both education professionals and lay board members felt that students could learn and could be taught to learn more effectively. In the districts housing the low-achieving schools, the view was negative and hopeless. Laymen and professionals "accepted" the position that the students were limited and came from limited homes. Only low levels of achievement could be expected (Iowa Association of School Boards, 2007).

From these studies it appears that staff development was conducted less mechanistically and more integratively in the high achieving schools and that the ethos of the school district was different in those districts that contained the high and low achieving schools. Also, differences in SES did not explain differences in achievement or ethos. Rather, in that state, some of the highest-achieving schools were in the lower SES categories and some of the lowest-achieving schools were in the higher SES categories. School and district ethos trumped SES.

These findings provide an optimistic base for the various types of staff development. If we begin with the proposition that teachers can learn so effectively, then the design of various types of staff development can capitalize on their capability and what is known about the environmental elements that can be used to develop effective designs. *That a*

function of staff development might be to generate more elevating ethos might lead to some new strategies for staff development and school improvement efforts.

Squeezing Information About the Types of Staff Development

The generic knowledge can be applied to each of the types of staff development that we discovered in the literature. However, that application is not always made. In the following section we will look at studies that directly apply to those types and suggest ways that the generic knowledge can enhance their use.

1. Curricular and instructional development and improvement

Content – curriculum and instruction in the curriculum areas – gives definition to this type of staff development. Various staff development processes can be employed, but improving curriculum and instruction of small and large magnitudes is the target and the overall paradigm fits the rational-empirical mode mentioned above. Generally the study of implementation and effects on students is included. Assumptions include that formal curriculum and instructional development efforts can generate approaches to education that can reliably pay off for students and that teachers can be brought into professional inquiry by studying them. Research and evaluation literature: The area has a long history and studies were most dense during the period of the academic reform movement (1955–1980) when foundations and government agencies like the National Science Foundation funded efforts to update curricula in the academic areas.

The evaluation of a number of curriculum development/dissemination efforts contradicts the assertion by Richardson and Placier that there is "the sense that the rational-empirical strategies have not been particularly successful in educational projects." We will examine just a few items.

Success for All. For more than 20 years this literacy curriculum has generated consistent if moderate gains with the most unlikely populations of Title One students. The magnitude of its success is dramatized by the title, *One Million Children* (Slavin & Madden, 2000) of the book summarizing the approach and its successes. Success for all asks that schools vote to participate, works within the confines of the usually-available time for staff development, and provides facilitators to follow up the training and help schools adjust as they implement the curriculum materials that are provided. Effect sizes for a year range between 0.30 and 0.40. Some students gain more in comparison with schools not using Success for All. The effort is important for a number of reasons, including that schools in economically-poor areas were targeted, and the results conflict sharply with the dismal findings from less-structured Title I efforts.

Biological Sciences Curriculum Study was developed 40 years ago and is still going strong, with communication among teachers facilitated through the Eisenhower Program and the .com environment of today. The program is designed to teach the process of science through units in which the students are led through experiments to test or generate knowledge in biology. The instructor ideally has an ongoing study of his/her own going in the classroom and shares progress with the students. BSCS conducted (and still conducts) internal evaluations that have shown that it achieves its goals. Parallel research on other inquiry-driven programs has documented the feasibility of teaching scientific inquiry to children, including in the primary grades, and benefits in terms of so-called lower order outcomes, such as the acquisition of knowledge, and higher order outcomes, such as the ability to generate and test hypotheses.

The durability of the Biological Studies Curriculum (BSCS) is probably due to its focus on teachers who have much in common – they man the biology and general science courses in our schools. The manuals and textbooks are designed for the self-training of those instructors and summer workshops and other experiences are designed with the theory-demonstration-practice paradigm that appears to be so effective in helping teachers develop complex skills. The late Susan Loucks/Horsley was the coordinator of the BSCS movement and the influence of the academic reform movement and research on staff development are combined in many of her books.

Although the Eisenhower Program was a considerable boon to curriculum-area programs like BSCS, the evaluation of the program indicated that most of the staff development districts mounted under the Eisenhower Program were short, usually about 6 h in length (American Institutes for Research, 1999). Many districts may not have the socio-political capability to extend staff development beyond the designated three or four "staff development" days. The simple solution is to extend the days, but as proposals are made to do so, many teachers' organizations bargain for those days as preparation time, parent conferences, report card preparation time, and such. They rarely bargain for more staff development.

Reading Recovery

Reading Recovery is a program for struggling readers in the first grade. Speciallytrained tutors work one-on-one for 30 min a day for about 12–20 weeks. Evaluating the effects is complex, but we estimate that the program effectively reaches about three-quarters of the students referred to it and the effects apparently persist through elementary school and beyond (see for example, Pinnell et al., 1994).

Improving Quality of Writing Through Staff Development

In an initiative designed to assist teachers to use an inductive model of teaching to improve quality of writing, monthly staff development and follow-up including the self-study of implementation, average scores indicating quality of writing gained two times or more the amount that they had risen in previous years in the school district. The effects are clearly seen in year-to-year comparisons: average students exiting grade four began grade five about where grade six students had exited in previous years. Effect sizes for the various grades were in excess of 2.0 (Joyce & Wolf, 1996).

The curriculum/instruction development mode can enable teachers to develop new repertoire and use it. Poorly-designed, of course, the mode can fail, but there is sufficient information about positive practices that good designs should prevail. The approach depends on the development and testing of models of curriculum and teaching and educational practices (such as tutoring) designed to generate various types of student learning. Then, the question is the design of staff development that will enable the teachers to master the content and implement it in their settings.

States of Growth

Omnivores and active consumers are drawn to the curriculum initiatives and the longer amounts of staff development associated with it. Passive consumers are generally happy with it, but follow-up has to be arranged carefully, or implementation will be low. Done well, the curriculum approaches should bring more passive consumers into higher states of growth.

2. Workshops on generic instructional techniques

3. Unstructured instructional improvement disseminated by experienced teachers to novices, as in mentoring programs

These are very popular currently, and supported by legislation in many states that require new teachers to be connected to a mentor for up to two years as part of an "induction" program. The assumption is that experienced teachers have knowledge and skills that can benefit novices and that they can impart them through discussion, observation, and modeling. Although mentors may receive some training – in some cases extensive work-shops – the assumption that experience has provided the important knowledge prevails in most settings. However, extensive training programs exist and there are lengthy books with ideas for mentors and the organizers of mentor programs (see Bartell, 2005; Villani, 2002). The core of the mentorship concept is that of apprenticeship, where the more experienced practitioner socializes the novice into the norms of the field. Mentor programs also pair experienced teachers with teachers who have special needs, such as classroom management, although the mentees are also experienced in that case. Time is less of an issue where just the pair are involved, but evaluations point to it as a continuous problem as, "who covers the mentee's class if s/he visits the mentor's class and *vice versa*?"

Mentoring shows up in the distance-learning area, as in the following rather optimistic picture – "A mentor watches her protege's lesson in another school via web-based videostreaming and then conducts a reflection conference via web-conferencing – without either one leaving his classroom..... the novice reviews and annotates sections of his lesson he wishes to discuss in depth with his mentor..." (Sparks, 2004, p. 109). Here a practice is recommended using media where it probably had little effect when employed in a person-to-person mode.

Research on mentoring is badly needed. A large-scale study piggybacked on the National Assessment program and investigated whether the connection of mentors with novice teachers reduced attrition, one of the expected outcomes of mentoring, and it did not (Smith & Ingersall, 2004). The most complex form of mentoring programs involve information to principals, the designation of the pairs – mentors and mentees, and sets of workshops for the novice teachers. This complex form, which was rarely used, reduced attrition. The design did not permit learning whether the workshops, rather than the mentoring relationship, might have been responsible.

The National Council of Teachers of English has created a variation of mentorship which they call "literacy coaches" and is joined by the International Reading Association

in the effort to promote it. The literacy coach is a well-thought-of teacher who is assigned to one or more schools and given the responsibility of providing help to the other teachers in the language arts curriculum area. As far as we know, the practice is unstudied, but it is becoming a common practice. However, "standards" for coaches are published, which apparently reflects the view that effectiveness lies in the competence of the individual coaches rather than the practice of coaching itself. A newsletter of the International Reading Association comments, "Most observers agree that reading coaches provide a powerful form of professional development – if they are skilled enough to meet coaching's varied demands" (IRA, 2004).

The quote reflects also the place of empirical enquiry in the field of education. Studying what these coaches do, the extent to which teacher behavior is effected, and possible effects on students should not be difficult.

Again, as in the case of teacher education, we wonder why the 45,000 education professors do not take on some of the current issues and practices, especially because research methodology exists and would be easy to apply. Providing coaches to individual schools or pairs of schools is not an inexpensive proposition and should be given serious study, especially because its cousin, supervision, has such a poor record.

States of Growth

Imagine the match-mismatch problems in this one. A reticent personality mentoring an omnivore. And so on. If the mentor is too authoritarian with an omnivore or active consumer, the mentee will find another vocation.

4. Structured instructional improvement through supervision, where elements of instruction are disseminated by supervisors or mentors or peer interchange

A paradigm is presented that represents the preferred method of teaching or organizing lessons. The most used process is the clinical supervision pattern where a supervisor or mentor or peer discusses a lesson to be observed (the pre-conference), observes the lesson, and then discusses it from the point of view of the paradigm. This is the type of professional development sometimes referred to as a "deficit model" (Lieberman & Miller, 1992). That sobriquet is partly substantive – the teacher's performance is, in fact, held up to a paradigm of adequate performance – and is partly socio-political as "top down" methods have fallen out of favor. The structured clinical supervision model was very prominent from about 1970 to 1995-2000. Oddly, very few studies were conducted on its effectiveness on changing teacher behavior, and that research did not clarify whether clinical supervision had positive effects on teachers. Supervision as a field whose primary method is one-on-one observation and conferencing needs to examine its most-used methods and its content, but at this point it's mainstay strategy – discuss – observe – conference – is a low-probability field with respect to its effects. Yet, its tradition persists in some forms of what is called peer coaching (Robbins, 1991) - really peer-supervision - and in recommended strategies in mentoring.

However, some years ago, studies where teachers were taught methods for studying their interaction with students had considerable effects. Teachers developed more positive interactions with the students and generated inquiry-oriented modes of handling information with them (for summaries, see, Joyce, Peck, & Brown, 1981). The field of supervision might profit were it to incorporate some of the methods for helping teachers study their behavior and that of their students in a formal manner.

States of Growth

Omnivores and active consumers are not happy with the superficiality of the supervisory approach and they can find themselves being supervised by personnel below their own level of development. Altogether, not a form to instigate life-long learning. Passive consumers go along with it, but the reticent folks fight it tooth and nail.

5. Open-ended local learning community activity – where school faculties or teams come together to assess their situation and make decisions about needed improvements

This mode is also very much in fashion. The major assumptions include the belief that working teachers have both a good deal of clinical knowledge that they can share the process skills to examine their workplace and generate solutions to needs they perceive. This is the classic "inside-out" strategy where the strength and common sense of the practitioner is relied on to find ways to improve instruction. A variation is the "study group" approach where faculties are organized into groups who approach various topics. A slight difference is the use of readings about various topics, the readings usually provided by facilitators. Advertised as the development of "Learning Communities," this mode is promoted by both ASCD and NSDC at present.

Again, research is absent. However, there is a long history of similar practices in the Middle School Movement. Teachers in the classic middle school format are organized into teams and provided regular meeting time that can be used to work on the improvement of curriculum and teaching. Middle school learning teams have not been carefully studied, but experts are skeptical about the productive use of time. One study contrasted departmental meeting structures with across-curriculum area structures and reported that the cross - curriculum structures developed a greater sense of empowerment in the teachers. The result on curriculum and instruction was not studied.

The learning community approach has much to recommend it in theory. How to engineer it properly is a much more iffy question (see Joyce, Weil, & Calhoun, 2009, for a general critique). As in the case of subject-matter coaches, the proponents of learning communities seriously underestimate what it takes to make them work.

States of Growth

Very serious research needs to be undertaken here. A collection of persons in active states can be wonderful. How about a community of passive consumers. Or several passive consumers with a negative reticent on the team?

6. Action research – disciplined inquiry by faculties who study the curriculum, instruction, and social climate of their schools and make decisions about school improvement

The primary difference from the open-ended learning community approach is the use of the action research paradigm to structure the inquiry. Also, the only evaluated version envisions the entire faculty as an inquiring group, although there will be smaller task groups. Again, the knowledge of the practioner is important, but facilitators provide tools for assessing the environment and considering alternatives. Action research is a long line of inquiry including luminaries from Lewin, Corey, and Deming to the present scholars of the process. Calhoun's studies (1994) indicated that nearly all faculties need assistance from an external facilitator to make progress and the schools that have made a difference in changing practices in such a way that student achievement rose have all had substantial technical assistance. Also, they have made inroads on the time problem, sometimes with extensive *ad hoc* provisions. Two aspects of Calhoun's studies on action research stand out. One is sorting through a large number of projects (100 or more) to find ones that made a difference to practice and to student learning, then trying to learn whether the successful projects had characteristics different from ones where practice did not change. Second was the realism applied to make recommendations, especially that schools needed help from external facilitation in order to carry out the action research paradigm, and that facilitator needed expertise in curriculum and instruction as well as process. This last criterion may be very important. For many years organizational development, where external facilitators are an important feature, has struggled to be effective in bringing about productive change in educational organizations. Its facilitators come equipped with grounded theory and organizational skills. But - many have not been equipped with knowledge in curriculum or instruction and cannot provide leadership in those areas which are so central to the work of schools.

States of Growth

Disciplined action research is red meat for the omnivores (no pun intended) and active consumers. If they lead, passive consumers can be brought along. Principals who are passive consumers will not make good leaders of this mode. The reticents will hate it, especially if more public teaching ensues.

7. Open-ended individual inquiry – individuals are supported in their personal efforts to improve their teaching

Although individual-oriented support does not prevent groups of teachers and administrators from working together to improve their performance, the assumption is that at least a portion of the support can be devoted to helping individuals select avenues for their development and pursue those avenues. The sabbatical is the classic mode for this type of professional support, but many less extensive provisions are made, such as support for travel or attendance at special conferences or institutes.

Supporting individual study seems eminently worthwhile, but has not been an attractive one for study. The University Town project is the only one we know of that has focused on it in recent years. The most important finding there was the incredible variance in teachers' orientations toward the opportunity to receive a thousand dollar stipend for study that could range as widely as individual travel to formal courses to pooling resources for study or curriculum development activities. Some took full advantage of the initiative. But – a quarter of the teachers simply turned their backs to the opportunity. A substantial number opined that schoolwide action research

and a district initiative in the language arts were more productive. We believe that a team of researchers could figure out how to engineer initiatives to support teachers as individuals and have a jolly good time in the process.

States of Growth

We can confidently assume that the people in the active states of growth will profit the most, as they will with distance education, below. However, if they were mixed with passive consumers, we might see some real growth.

Distance learning is a category not quite parallel to the above ones. Generally it is a variety of support for individuals, although support for groups or faculties is not out of the question and is worth including here because of the distance interface. Using the computer and other media, instruction is offered. The field is growing rapidly. An example is the more than 80 courses offered by the Public Broadcasting System's TeacherLine series. Interestingly, it offers staff development credits and even university credit for its courses. Also interestingly, the RFP's to develop courses were answered by and development conducted by many of the providers who have offered courses and workshops at the national and regional conferences of the national organizations. Thus far, most of the offerings use the *du jour* content criticized in the NSDC advertisement.

The national-level consulting agencies are present as offerers, as is ASCD, with its own array of courses. Incidentally, NPB and ASCD offer both CE units and university credits. The mediated format has obvious attractions. Clearly, certain kinds of learning can be facilitated through media. However, although one might think that the area would be attractive to researchers, that has not been the case. Mediated instruction has a good record, however – the tremendous success of the Open University in the United Kingdom is testimony to the range of learnings that can be accomplished through resource-based education.

For some time the national organizations have presented material through videotapes and books – often the tapes and accompanying workbooks are advertised as the foundation of workshops. Adding the computer to the mix has resulted in a tone of increased formality – objectives, procedures, assessment exercises and such – that elevate the sense of being a workshop or course.

Looking Again at Square One

Where does the major current practice, the use of smorgasbords of short workshops by regional centers and the larger school districts, fit into these categories? The answer is that almost any topic we can imagine can be dealt with in short workshops – the issue is simply one of how much depth can be developed. There are brief workshops for mentors, mentees, on topics within the curriculum areas, on how to organize learning communities, and so on and on. And, as indicated earlier, the topics that dominate the smorgasbords are found through surveys called "needs assessments." And, there is no reason why the respondents could not ask for longer workshops with follow-up built in. But, they generally do not. In our study in Florida, we found that some of the large county districts offered as many as a thousand short workshops on their designated staff development days. A substantial portion had no content that could be implemented in the workplace although a thorough, if rather stiff, needs-assessment had produced them.

Improving content should be conceptually easy – there are plenty of useful curricula and models of teaching. Process needs attention, but part of that attention might be directed toward the preparation of the workplace to implement good content. Were peer-coaching teams to attend workshops, the implementation picture might improve markedly.

As we complained earlier, we wish there were researchers willing to see what they can do to engineer more effective short workshops on topics that are amenable to "shortness." But – we do not. But, then, that is true of supervision, learning communities, mentoring, and teacher education in general. The problem is not one of need for research, the opportunity to conduct it, or the tools of inquiry. A lack of interested, research-oriented personnel is the problem.

Available Knowledge and the Making of Decisions

The forceful language of the National Reading Panel and the equally forceful regulations accompanying No Child Left Behind have brought considerable attention to the status of educational research and how to conduct it. The findings of the panel were themselves controversial both as to method and substance (see Allington, 2002). Also, the panel dismissed qualitative research and correlational methods, among others. With the forcefulness of the federal guidelines, states and schools were admonished to use only methods that were based on classical experimental designs and published in peer-reviewed journals and not to use reviews because those are "secondary sources." Aside from the anomaly that the field of education has only a tiny handful of journals that are peer-reviewed and the most prominent ones (as AERJ) publish few reports on curriculum, instruction, staff development, and school renewal, the constraint would shrink the curriculum to those few areas where, controversy aside, there are a number of classical studies that agree with one another. Very important areas could receive no attention because approaches have not been tested with classic designs. An example is the panel (and, thus, NCLB) recommendations that curricula not include provisions to help students read more, because the evidence is "only correlational." Also, no matter how much huffing and puffing the government has been doing about "evidencebased," "scientific," and "peer-reviewed," judgments about the quality of studies and their meanings have to be made and made carefully. The panel sorted out thirty-some studies in the phonics area that met their criteria and then computed the effect sizes of the studies. They did not point out that, in half the studies, there were no measures of whether the students were actually applying the phonics concepts and skills to unlock words in text! Oh, my!

Also, on the subject of judgment, the selection of the peers to conduct reviews has to be made carefully. In our view, if a productive scholar who is a leading specialist in a field submits a report of a study, the report should be reviewed by people who are also specialists and, preferably, leading ones and productive as well. In any case, reviewers need to look at the conceptual base, the treatment of prior studies, and the design of the studies. The review process is difficult in structured fields and educational research is not a mature field. Reviewers have to be careful that they not let their own ideologies or preconceptions determine their process. Many professors of education take the view that reality is situation and person-specific. Situations and people are very important, but, taken to an extreme, the possibility of developing general knowledge is called into question. We become lost in the reality of variance in people and situations. Developing general approaches to curriculum and teaching, including in staff development, cannot happen unless one believes that there are enough common characteristics in students, teachers and workplaces that concepts can be formed that apply to many people and places (see Bereiter, 1984, 1997; Phillips, 1995).

Another common dictum expressed in educational research circles is that, to be believeable, a finding supporting an educational treatment needs to be replicated by researchers not connected to the developers of an initiative in curriculum, instruction, staff development, or school improvement. Well, now, that's not so easy. Certainly the initial design needs to include provisions that take care that objectivity has not been lost - that the "experimenter effect" did not generate the findings. Then, the design needs to be one that can be replicated. And, the demand for replication needs to be reasonable. In our current work we and our colleagues have generated a curriculum to rescue students from grades 4–10 who have not learned to read adequately and are failing in school. We are studying the effects as carefully as we know how, and believe that the results can be replicated. To do so, however, the replicator would have to master the curriculum, learn how to prepare teachers to use it, study implementation, and study student effects. We would love it if someone would do that, but it would take five years of the lives of the replicators and probably a million dollars, which would difficult to raise. And, we have very few researchers who can master a curriculum, learn to teach it to others, persuade districts, schools, and teachers to try it with parental permission, administer tests where the testors are blinded, and manage all this. Replication is important, but education is not a chemistry lab where you can synthesize new drugs from off the shelf materials and test them on desperate patients – and replication of trials in the biochemical field is terribly difficult. The welcome replication studies of Success for All cost several million dollars (see Borman et al., 2005). Success for All's continuous embedded studies in setting after setting had left us in no doubt that it was effective.

We are drawn to the perspective of Abraham Kaplan (Kaplan, 1964) whose studies of the methodology of the behavioral sciences cover all the related disciplines and sub-disciplines. As he introduces his inquiry, he comments,

This book will contain no definition of 'scientific method, whether for the study of man or for any other science.... because I believe there is no one thing to be defined.... One could as well speak of 'the method' for baseball. There are ways of pitching, hitting, and running bases; ways of fielding; managerial strategies for pinch hitters and relief pitchers; ways of signaling, coaching, and maintaining team spirit. All of these, and more besides, enter into playing the game well, and each of them has an indefinite number of variants. We could say, of course, that there is only one way to play: to score runs if you are batting, and to prevent them if you are not. And this statement would be about as helpful as any general and abstract definition of 'scientific method.'... If we are to do justice to complexity, I think it is hard to improve on P. W. Bridgman's remark that 'the scientist has no other method than doing his damnedest.' (Kaplan, p. 27)

Whether or not one subscribes to the view of research espoused by the panel or the more recent modifications by the mandarins (see Allington, 2002), we need to face the question: How will we make decisions when our knowledge from research is imperfect or incomplete? And, how do we approach newly-created dimensions of curriculum or methods of instruction that may take years to develop but which promise to make productive changes to what is taught or how it is taught. For example, new resource-based, distance offerings are appearing at a very high rate. Aside from their content and internal methodology, the knowledge base under distance learning is flimsy at best. But, one has to decide, *now*, whether to help them become available to education personnel.

The logical answer is to assemble candidates for curriculum areas or for staff development and to assess the state of knowledge upon which they are based. Thus, using the example of assembling ways of encouraging reading as a component of a literacy curriculum, we can look at the evidence supporting *including* such a component and, then, assay the base under the alternative ways of designing the component. We can take a similar approach to the alternative curricula for staff development: Given the available alternatives, what evidence is now available? In both problem areas – components of curriculum for children or components for the curriculum for the continuing education of children – what is available and how much information do we have about them? We may do something where the knowledge base is partial or logical rather than whether empirical study supports it, as an alternative to doing nothing in an area we believe to be important.

What Is Good for What?

All the types of staff development that are advocated in the literatures have some merit, but most have a thin or nonexistent research base. We conclude that there is no good reason to curse that darkness. There are plenty of options and lots of good work to be done building a better evidential base.

We devoutly hope that the frame of reference that will be taken in the future will be to celebrate alternatives and not pit them against one another. There are enough problems without, say, pitting school-wide action research against unstructured inquiry by learning communities. Or curriculum development against the personal service in mentoring programs. Or situationistic perspectives against rational-empirical endeavors. It disturbs us when the national organizations co-opt themselves into a comparative position that will simply not pay off. As "Research shows that coaching can improve teaching performance over the long run more effectively than one-time seminars, assuming that the coach is an expert teacher and is also effective at working with adults (International Reading Association, 2004, p. 18)." This is a rhetoric derived from the "trash and claim" syntax described as we began this discussion. The organization takes something that is assumed to be worthless and then contends it has a better solution. Unfortunately, that solution is one for which there is evidence – unfortunately, evidence that it is not a very strong intervention.

More theory is needed as is the research to test it. More careful evaluation of existing modes is needed. And, there is a great need for "engineering" research – programs of studies that aim at making existing modes better. Currently, areas like mentoring are low-probability propositions. We sense that it could be developed into a high-probability area. And, several other modes can, too. To belabor a point, the hated short workshops might look a lot better if they were hooked up together into a 4-day experience, the participants came having read appropriate material and prepared to read afterward, were given video taped demonstrations to watch between sessions, and were organized into peer coaching partnerships to study implementation and effects on students.

Above all, therefore, we need careful developmental research. Educational treatments take time to develop and testing is not just a matter of proving that something is better than a failed treatment. Saying that something is better than a workshop you believe is not worthwhile obscures the real enterprise of research and development work – to build, gradually and lovingly, better and better models for education. In this case, that means the education of the educator.

There are well-developed life-long educational professionals.

Can we increase their numbers. Yes we can.

We believe that teachers want to learn and that there are many models of teaching they would be happy to learn when they are available. and, learning more leads to the desire to learn more.

Staff development has not been in good shape, but it can be!

Biographical Notes

Bruce Joyce has served at Teachers College, Columbia University and The University of Chicago as director of Elementary Teacher Education. He has conducted research on instruction, conceptual level, staff development, and school improvement and published on those topics.

Jim Wolf served as director of special education and superintendent of schools in the Department of Defense Schools in Panama for 30 years. His work includes studies of deaf and blind students who have other learning disabilities and he has served many states, Canadian provinces, and school districts on school improvement, including the Iowa School Boards studies of ethos in high and low-achieving school districts. (He is deceased).

Emily Calhoun is the Director of The Phoenix Alliance, which provides long-term support to school districts and state/regional agencies that are committed to improving student achievement through investing in staff learning. Her major work is helping responsible parties study the effects of curriculum and instruction on student learning and strengthen the learning environment for all. Emily's special research interests include literacy development at all levels and the use of action research for individual and organizational development.

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Section 3

THE CHARACTERISTICS OF TEACHERS

THE STATUS AND PRESTIGE OF TEACHERS AND TEACHING

Linda Hargreaves

Introduction

Teachers are entrusted with the task of ensuring children's intellectual growth and preparing each new generation to meet the challenge of the future. One might expect that such important work would enjoy high status and considerable respect and reward within any society, but as we shall see this is not always the case: while teachers in some countries enjoy high salaries and comfortable working conditions, elsewhere they may have to do two jobs in order to survive, or they may not have been paid for months. Fortunately, as Lortie (1975) pointed out, teachers tend to seek the 'psychic' rewards - the desire to give children a good start in life and the pleasure of seeing them learn – rather than material rewards for their work. Unfortunately, Hoyle (2001), noting the British Labour government's determination to raise the image, morale and status of teachers [e.g., DfES (Department for Education and Skills), 1998] sees this vital relationship with children as 'an intractable barrier' to improved prestige for teachers. In this chapter we shall explore these matters further, beginning with definitions of status and prestige, moving on to consider the current status of teachers, the hypothetical determinants of teachers' status, the impact of various policies and, finally, the consequences of the status of teaching for the profession.

Status and Prestige

In everyday discourse, terms such as prestige, status, esteem, respect are used almost interchangeably. *Prestige* is defined as 'influence, reputation or popular esteem derived from characteristics, achievements, associations', while *status*, for the purposes of this chapter, is defined as 'position or standing in society; rank; profession; relative importance' in the New Shorter Oxford English Dictionary, (1993). Encyclopaedia Britannica's (2008) on-line definition of status goes further:

the relative rank that an individual holds, with attendant rights, duties, and lifestyle, in a social hierarchy based upon honour or prestige. Status may be ascribed – that is, assigned to individuals at birth without reference to any innate

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abilities – or achieved, requiring special qualities and gained through competition and individual effort.

Status, of course, is a crucial sociological concept, as Turner (1988) demonstrates through a series of six definitions of status. These culminate in his view of status as equivalent to modern citizenship, but take in the Weberian notions of 'status groups' and lifestyles, defining status as,

... firstly a bundle of socio-political claims against society which gives an individual (or more sociologically a group) certain benefits and privileges, marking him or her off from other individuals or groups... This cultural aspect of status gives rise the a second dimension, namely the notion of status as a cultural lifestyle which distinguishes a status group with special identity in society. (1988, p. 11)

Turner refers also to the distinctive American construct of 'subjective status' in which self-perception of rank or prestige became important in the 20th century US social context of consumerism, rapid social mobility and emphasis on personal achievement. Thus we have both 'a "subjective" dimension of status (individual perceptions of prestige) and an "objective" dimension (the socio-legal entitlements of a individual' (Turner, 1988, p. 5). This subjective dimension is especially relevant in the case of teachers, whose subjective status typically underestimates, and, arguably, limits their objective status.

Finally, Hoyle (2001), long-established scholar of teacher status and professionalism, argues for the adoption of a consistent terminology which recognises prestige, status and esteem as separate components of 'status'. Hoyle's definitions are

- occupational prestige: public perception of the relative position of an occupation in a hierarchy of occupations (p. 139).
- occupational status: a category to which knowledgeable groups allocate an occupation (p. 144) In other words, whether knowledgeable groups such as politicians, civil servants, social scientists refer to teaching as a profession or not.
- occupational esteem: the regard in which an occupation is held by the general public by virtue of the personal qualities which members are perceived as bringing to their core task (p. 147).

This chapter will focus on teachers' occupational prestige, esteem and subjective status, using the word 'status' generically, and 'prestige' in Hoyle's specific sense.

What Is the Current Status of Teachers?

Generalisation about teachers' occupational prestige, is not straightforward. The OECD's (2005) 25 country survey on the recruitment and retention of effective teachers is both comprehensive and detailed. It acknowledged a 'frequently voiced concern that teaching has fallen in social standing over the years', but concluded that the 'social standing of teachers seems quite high and seems to have changed little over

the years' (OECD, 2005, par. 3.3.5). Nevertheless, OECD identified the improvement of the image and status of teaching as its highest priority policy objective.

Status, of course, is a relative concept and is subject to cross-cultural variation, despite Treiman's (1977) structural theory of prestige determination argument that 'since the division of labour gives rise to characteristic differences in power, and power begets privilege, and power and privilege beget prestige, there should be a single, world-wide occupational prestige hierarchy' (pp. 5–6). He suggested that this hierarchy would be invariant in all complex societies, past and present (p. 223), and, using 85 studies of occupational prestige from 60 countries, created the Standard International Occupational Status scales (SIOPS) based on the International Standard Classification of Occupations (ISCO-68) [International Labour Office (ILO), 1968]. High correlations between pairs of countries (average 0.83 with US-UK and US-Australia over 0.9) seemed to confirm his theory concerning complex societies, while at the other extreme, the US - India-peasant correlation was 0.19.

Ganzeboom and Treiman (1996) updated SIOPS to correspond with the ISCO-88 (ILO, 1988) but found little change in teachers' occupational prestige. They point out the difficulties in cross-national measurement of occupational status, due to the differences between national classifications, the change in these over time and the difficulty of finding reliable and comparable cross-national measures. The new ISCO-08 (ILO, 2007) differentiates jobs more finely within teaching to include (i) recognition of a new group of 'vocational education teachers', (ii) the 'merging' of primary teachers and 'primary education teaching associate professionals' (including teachers' aides) who were previously in Major Group 3, a move with serious implications for the occupational prestige of teachers; (iii) greater differentiation of 'Other teaching professionals' to recognise teachers of languages, music, arts and information technology [ILO (International Labour Office), 2007] The effect on revised SIOPS teaching scores remains to be seen.

Using such international scales, Hoyle (1995, 2001) stated that the occupational status of teaching was both consistent over time, and high compared with all occupations. Teaching scores are relatively high compared with other public service occupations (nursing, social work, police) but lower than the major professions (medicine, law and architecture). Table 1 illustrates these points but also reveals the wide differentiation of prestige scores within the teaching profession.

Table 1 masks wide international variations, however. The OECD (2005) survey found countries such as Italy, Korea, Portugal and Spain where teaching was considered an attractive occupation, recruitment to the profession was not a problem, and countries where experienced teachers enjoyed high salaries relative to their national GDP per capita, notably Korea and Mexico, or relative to other public sector workers (Austria, Finland, Hungary, Mexico, New Zealand and Turkey). Yet, in Switzerland there have been teacher shortages recently despite high salaries, while in Hungary, teachers are plentiful in most subject areas, but earn only 0.75 of the GDP. They often need second jobs to supplement their incomes, despite a major rise in salaries between 1996 and 2002. In other words, identification of a single current status of teachers depends to a great extent on the nation in question.

Occupation	SIOPS 1977 ^a	SIOPS 1996 ^b
University professor	86	78-
Judge	78	76-
Trial lawyer/barrister	71	73+
Physician/medical doctor	78	78 =
Secondary school principal ^c	72	60-
Primary school principal ^c	66	60-
Secondary/high school teacher	64	60-
Special education teacher	62	62 =
Veterinarian	61	61 =
Police officer	60	40-
Primary school teacher	57	57 =
Social worker	56	52-
Accountant	55	62+
Nurse	54	54 =
Librarian	54	54 =
Teacher's aide	50	50 =
Pre-primary teacher	49	49 =

 Table 1
 The occupational prestige scores of teachers and other professional occupations according to the Standard International Occupational Prestige Scales (SIOPS)

^aTreiman (1977)

^bGanzeboom & Treiman (1996)

^cClassified in 1996 as 'Production Department Manager not elsewhere classified', along with Impre sario, Film Producer and College Dean.

Higginson (1996) noted a 'serious loss of prestige' in teaching 'once regarded as one of the noblest professions, ... as the key to the intellectual development of a country's human resources and the determinant of social and economic progress' ...

... Once prominent local officials, teachers today are more frequently regarded as simply ordinary civil servants, a shift in status which contributes to declining standards. Governments are increasingly obliged to seek new ways of attracting qualified young people to the teaching profession. (Higginson, 1996, pp. 9–10)

Many of UNESCO's (1966) Recommendations for the Status of Teachers were evidently unfulfilled by 1997 (UNESCO, 1966, 1997). Higginson goes on to identify numerous factors which contribute to teaching's low prestige, including the employment of unqualified teachers in developing countries, as well as developed countries where because extreme rural and isolated contexts are '... steadfastly resisted by accredited teachers as eventual postings, [so that] the authorities are often obliged to waive the accreditation requirements if they are to open a school.' The alternative would be to deny access to schooling and thus institutionalize socioeconomic and urban-rural inequalities.

Political instability and transition also contribute to low teacher status. Higginson refers to teachers' low salaries in Eastern Europe, the Caucasus and Central Asia in the 1990s, such that in the Russian federation 'a third of teachers lived barely above survival level', and 'in Poland, the average teacher salary fell by 66.7 per cent since 1989' (p. 11) to be 70% of their counterparts in other sectors by 1993. In Africa, Ogiegbaen and Uwameiye's (2005) survey of parents and prospective university students in Nigeria found negative attitudes to teacher education were influenced by teachers' low status and poor, irregular payments. Osunde and Izevbigie's (2006) survey of 400 post-primary teachers found the effect of low and delayed pay was a 'lost a sense of belonging', while 'poor conditions of service, wider negative influence and teachers' negative personal and professional behaviour' contributed to teachers' low status and esteem (p. 426).

The prestige of different groups of teachers within one country varies also. International scales such as SIOPS classifies primary and early years teachers as having lower occupational prestige than secondary teachers, although their qualifications, training and pay may be equivalent. In England, teachers such as those who work with children with behavioural or learning difficulties, substitute teachers, and, a matter of consternation, minority ethnic teachers experience a status deficit (Cunningham, 2006; Cunningham and Hargreaves, 2007; Hargreaves et al., 2007).

Finally in this section, teaching suffers from various status anomalies. In England and the US, for example, public opinion polls repeatedly show that teachers' occupational esteem is high, but this is matched by neither their prestige nor their subjective status. In Britain, MORI (2007) found that 96% of people are satisfied with the way that teachers do their jobs (i.e., Hoyle's definition of occupational esteem), and teachers have topped this list annually since 1999. Doctors are second with 91% expressing satisfaction. MORI (2005) revealed that teachers (selected by 88%) were the second most trusted profession after doctors (90%), and before professors (77%), judges (76%), and even clergymen (73%). In terms of subjective status, MORI's (2002) survey found that teachers themselves underestimate the respect in which they are held: 68% (of the sample of 70,000) thought the general public give them little or no respect at all. In the US, a Harris Poll (2005) placed teachers sixth after firemen, doctors, nurses, scientists, and military officers, and before police officers, as occupations having 'very great' or 'considerable' prestige. Furthermore, judgements of 'very great prestige' for teachers have shown a consistent rise from 29% to 47% in since 1977.

Given these variations and anomalies, we turn now to consider the determinants of the status of teachers.

How Is Teachers' Prestige Determined?

Several models and lists of the determinants of teachers' occupational prestige exist and we shall consider a few of them here. The common features of these models include socio-historical precedents, the size and nature of the teaching force, salaries and qualifications, image, knowledge and expertise. Hoyle's (2001) framework of hypothetical determinants of occupational prestige includes the inter-relationships between these separate elements. Hoyle's framework has three branches which stem from the fact that teachers' clients are children, and culminate in their contributions to the image of teaching.

- (i) The first branch refers to the nature of the teaching force. State education, in England at least, resulted in a large, urgent and sustained need for teachers to supervise the nation's children, and hence, because the size of the workforce limits teachers' pay, compromised the socio-economic status and academic quality of potential teachers. It also resulted in large numbers of women being recruited into elementary school teaching.
- (ii) The second, and middle, branch concerns the close but potentially fragile relationship between teachers and their young clients. As these clients grow-up and leave school, so they leave their teachers behind, forever associating them with childhood rather than adulthood. The most significant impact on teachers' status however, is the mere possibility that their clients could get out of control. Hoyle calls this 'the most intractable barrier' to enhanced prestige for teachers (p. 143)
- (iii) The third branch carries the ambiguities and diffuseness inherent in the goals of education itself, as teachers must not only train children in specific and measurable skills, but also, prepare them socially, emotionally, and intellectually, for the myriad wide-ranging possibilities that might await them. This range places limits on the feasible level of specialisation in teachers' professional knowledge and expertise. While secondary teachers typically have a specialist subject area, teachers of younger children tend to be generalists, possibly with specialist knowledge of child development.

For Hoyle all three branches conspire to depress teachers' occupational prestige.

Hoyle's model accounts for the prestige of teaching in England, and recent research by Hargreaves et al. (2007) tended to confirm the view that having to control a class, and deal with difficult behaviour were the principal detractors from the attractiveness of teaching. Citations of teachers pay dropped from second (20%) to fourth (12%) most frequently mentioned detractor from the attractiveness of a teaching career between in 2003 and 2006.

Socio-historic factors may or may not provide a vantage point for teachers' prestige. In England, for example, the urgent need for a huge workforce to educate the masses in 1870 resulted in the recruitment of anyone willing and able, and in the formation of the National Union of Teachers (NUT: originally the National Union of Elementary Teachers), determined to raise the status both of teachers and of education (Banks, 1971). In North America, Lortie (1975) refers to the teacher's 'special but shadowed' place in the Colonial tradition (p. 10), providers of the Puritan linkage between literacy and salvation, but 'symbolically and literally outranked by preachers' (p. 12). In contrast, Fwu and Wang (2002, p. 217) locate the high status of teachers in Taiwan in traditional Chinese culture, which placed teachers in the realm of heaven, earth, the Emperor and parents, and deemed them especially privileged to explore and explain the essence and operations of the 'True Way'.

This very high status is maintained today as Taiwanese teachers are drawn from the top 10% of junior high school graduates, and pass a highly competitive entrance

examination. They enjoy salaries 25% higher than other graduates and have the option to retire at 50, on a pension equivalent to 75–95% of their full salary (Fwu & Wang, 2002).

Hwang, Chang, and Kuo (2007) compared the social prestige of teachers in Taiwan, with those in the UK and US, noting the rapid turnover of teachers and relatively low graduate salaries in the west. They cite Wolfensberger's (2000) model of the determinants of status, defined as the salaries, the image and competence of teachers, three factors that align with Hoyle's three branches. The model suggests upward and downward cycles of teacher prestige, dependent upon the academic calibre and socio-economic pool from which new teachers are drawn. Thus in the upward cycle, higher entry requirements, higher salaries and high quality continuing professional development (CPD) will attract candidates of higher socio-economic status, who will in turn attract more such candidates, thus further raising the prestige of teachers. Unfortunately, they suggest, England and parts of the US, appear to be stuck in a downward cycle as they appear to be having some success in retaining these high fliers in the profession (Hutchings, Maylor, Mendick, Menter, & Smart, 2006; Ofsted, 2008).

In Finland, too, teachers' enjoy high prestige, and unusually, primary teaching is a sought after, high status occupation. Malaty (2004) relates this to the transfer of responsibility for teaching basic skills from the church to the village primary school in 1921, such primary teachers became 'the enlightening candle of each village' (p. 11). Then, in 1974 all primary teacher education was transferred to universities, heralding the present situation in which all teachers have Masters' degrees. He notes also the good working conditions, small classes, welfare role and professional autonomy in curricular decision-making that teachers enjoy, together with freedom from discipline problems, inspections and pressure from a private sector. Parents trust teachers to support their children's growth. Paradoxically, the Finns' mathematical superiority has emerged from is based on a curriculum that emphasises the visual arts, music and physical education, with relatively few maths lessons per week. Since some argue that the high proportion of women in teaching constrains its prestige (e.g., Basten, 1997; Hoyle, 2001), it is worth noting that women enjoy higher status in Finland than elsewhere (Lewis, 1988).

Hall and Langdon (2006) offer what might be seen as a 21st century model of status determinants derived from their research on teachers' status in New Zealand. They found that in 'the "old days"... ... status was accorded more to those who were "pillars of the community" which *sometimes* included the local teacher people seen as having the power to influence society', but nowadays, status depends on people having some form of exclusivity, or image which differentiates them from 'ordinary folks' (p. 27). Hall and Langdon identify three present day 'drivers' of status, namely power, money and fame, and say that 'without at least one of these, an occupation does not appear to have any status at all in the wider community' (p. 26). These are supported by two secondary influences on status: 'influence on people's lives', and skills, training and expertise. Insufficient on their own, 'it is only when [these secondary influences] "cause" the career to be seen as making people rich, famous or

powerful that status happens' (p. 26). Teaching fails to make the highest status career, because teachers' power over people has been eroded as 'kids know their rights', and their pay does not equal that of doctors, politicians or professional sportspeople. While teaching is unlikely to make one famous, one might dream, frivolously, about what the Teaching Awards ceremony in England, or 'Education Oscars' in Austria (OECD, 2005) might achieve!

Finally, pursuing what Turner (1988) defines as American thinking on the determinants of status, teachers' subjective status may have a contribution to make to their prestige. In England, teachers' persistently negative perceptions of their status, and universal but out-of-date conviction that they have a negative image in the press, may exert a depressing effect on their prestige (Hargreaves et al., 2007). On the other hand, good facilities and buildings undoubtedly enhanced their subjective status, as did involvement in research and in provision of initial and continuing professional development for colleagues. Likewise, being funded to seek higher qualifications, or given significant professional challenges with support by enterprising school leaders strongly enhanced their subjective status. Thus, in addition to higher salaries and evidence of government trust, teachers felt that greater public and policy maker awareness of these essentially vocational aspects of their work would improve their status.

Change in the Status of Teachers

Hoyle (1995, 2001) argues, on the basis of international scales such as Treiman's SIOPS (1977) that the status of teachers is relatively high compared with other occupations, but that it is also resistant to change. Teachers, and other education stakeholders in England, however, perceive a dramatic fall in teachers' prestige since the 1960s, driven no doubt by the lambasting of teachers by press and politicians alike in the 1990s (Woods, Jeffrey, Troman, & Boyle, 1997). The perceived decline appears to have bottomed out in the last decade, however. This corresponds with (but may not be a consequence of) a government intention 'to raise the image, morale and status of the profession' (DfEE, 1998, p. 13), reiterated in 2001, to create the 'teacher of the future' who has 'more status and more responsibility, and a better work-life balance, in support of higher standards of teaching and learning' (DfES, 2001, p. 14), and again in 2004, 'Our goal must be to make working with children an attractive, high status career' (DfES, 2003, p. 10). A torrent of policies intended to achieve this goal was introduced. These included the creation of a General Teaching Council (GTC), introduction of rigorous national qualification standards, a stepped, rather than 'flat' career structure, prescriptive national frameworks for teaching, reform of the workforce which places teachers in managerial roles and as members of multiprofessional teams. While the creation of the GTC has as yet unrealised potential to raise teachers' status, the last two reforms increase the visibility of teachers' work with adults thus also potentially enhancing teachers' prestige, according to Hoyle's model. Yet, still the GTC has no control over entry to the profession, and the workforce reforms potentially undermine teachers' prestige by admitting under-qualified and poorly paid teaching assistants to a wide range of teaching duties.

A fundamental flaw in England's reformation programme has been the exclusion of teachers themselves from the development process, particularly, for example, in the development of standards, thus indicating a lack of government trust in the profession (Mahoney & Hextall, 2000). In contrast, Cameron's (2003) examples from Australia and the USA, reveal the Australian College of Educators' 'national commitment from the profession itself towards developing and assessing teaching standards to promote and enhance the teaching profession' and a national consensus that professional standards for teaching should 'be the responsibility of, and be owned by, the teaching profession in collaboration with key stakeholders' (p. 35). In the USA, the National Board of Professional Teaching Standards has aimed to enhance the quality and status of experienced teachers through its voluntary scheme of standards of effective teaching, and is described by Cameron, as having 'become a truly national voice for teaching' (p. 34).

Cameron's (2003) review concludes that success in raising the status and quality of teachers depends on an overall local and national vision, which avoids the co-existence of contradictory policies, as, for example where high stakes assessment, and hence 'teaching to the test', runs alongside encouragement of teachers to develop their pedagogical repertoires. The more successful projects identified by Cameron, typically

- were supported by high level leadership and advocacy,
- built networks and understanding within different parts of the system,
- saw learning to teach as requiring intensive scaffolded preparation,
- sought to position teachers in a supportive policy environment,
- enhanced teacher and principal leadership,
- were based on sound professional knowledge and research,
- were allocated enough resources to allow effective implementation without causing burn-out,
- were implemented by people who know and care about what they are doing,
- increased the performance and capability of teachers in their daily work,
- gave teachers opportunities to build their own content and pedagogical understandings in mentored situations,
- looked for evidence about the effect on schools and students,
- strengthened the capacity of the whole educational system,
- had some consequences for teachers in addition to being better teachers. (Cameron, 2003, p. 38).

Barber and Mourshed's (2007) study of 25 education systems that perform well in numeracy and literacy, argues that despite immense investment in educational reforms the performance of many school systems has shown very little improvement in standards. They note, however, that in all the most successful systems, the high quality and status of the teachers are common features, and claim that new teachers saw status as one of the most important factors that attracted them into teaching. Reminiscent of Wolfensberger's model, they suggest that there are 'strong feedback loops' such that 'once teaching has become a high status profession, more talented people became teachers, [thus] lifting the status of the profession even higher' (p. 22). Hwang et al. (2007) cite Finland and South Korea as key examples of the upward cycle.

Clearly, governments' attempts to raise the status of teachers can succeed only if they increase the respect and reward accorded to teachers, by both improving the quality and standards of professional qualification and practice but also by demonstrating respect and trust for the profession. This might be achieved by encouraging teachers to exercise critical autonomous judgement, through high quality professional development, by supporting their involvement in continuing professional development, in research and in reflection on their practice. If teaching is to become a high status profession, teachers themselves, like doctors, barristers and architects, must be involved in the admission, regulation and development of membership of their profession.

Implications for the Profession of the Status of Teachers

Hoyle (2001) suggests that the only facet of status that teachers can influence themselves is the occupational esteem attributed to them as a result of the way in which they do their work. Of course, this esteem has a better chance of translating into prestige if teachers engage with a wider constituency than parents, such as local communities and local businesses. There are other ways too that teachers might improve their prestige especially if supported by governments. First, teachers need to improve their collective self-respect and raise their subjective status at least to the level of stakeholder and public status attributions (see, e.g., Hargreaves et al., 2007; OECD, 2005). Subjective status improves when teachers

- feel valued within the profession,
- feel trusted by school leaders present them with challenges, and time and support to meet those challenges,
- are funded to engage in further professional training or education such as masters courses in inclusive education,
- can work with high quality resources and facilities, which show insiders and outsiders how much the profession is valued,
- get involved in research, as part of a major project, or in practitioner research,
- become providers of continuing professional development for other teachers.

Teachers themselves, in England, see public and policy maker awareness of their work as critical to raising their status. They need to feel trusted by their government, by having their professional autonomy and judgement recognised, and being released from excessive control and regulation. Teachers themselves need to inform others about their work, and enable the public to see beyond the impression that class control is their major role.

Finally, Hwang et al. (2007) suggest that governments can raise the prestige of the profession by raising both the salaries and the academic level requirements for training and to achieve qualification. However, advanced study (e.g., at master's level) demands critical appraisal of educational initiatives. Government must be prepared to allow its practitioners to critique, adapt and contribute to educational policies. Governments can also create teaching councils, equivalent to those in medicine and law, such that the profession itself would regulate entry to the profession.

Conclusions

This chapter has shown that there is considerable international variation in teachers' prestige. It is high in countries such as Finland, Japan and Taiwan, but low in others where teachers may be poorly paid. Nevertheless, as a common determinant of status, pay does not guarantee high prestige. One critical factor would seem to be the academic quality of those who enter the profession. Where teachers enjoy high status, they are typically drawn from the upper quartiles of achievement in their education systems. In the UK and USA, however, the most academically successful graduates are under-represented in teaching, although new schemes which target high flyers appear to be having some success. While findings from New Zealand suggest that fame, riches and power are the 21st century drivers of status, it is suggested that teachers' prestige could be improved by freedom from excessive government control, recognition of their professional autonomy, professional self–regulation, and involvement in research and the provision of continuing professional development. Such developments might raise teachers' status while sustaining the 'psychic rewards' and vocational principles that characterise their professionalism.

Biographical Note

Linda Hargreaves is a Reader in Classroom Learning and Pedagogy at the University of Cambridge Faculty of Education, UK, having previously held lectureships at the Universities of Durham and Leicester. She has a background in psychology and has conducted research on classroom interaction processes, school transfer, co-operative groupwork and educational provision in small rural schools. She recently directed the major English government–funded national project on teacher status (www. educ.cam.ac.uk/research/pastprojects/teacherstatus/) 2002–07, and has a particular interest in the status of teachers of early years and primary children, and teachers of music. She is currently an Associate Director of the independent Primary Review (www.primaryreview.org), directed by Robin Alexander at Cambridge University Faculty of Education.

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THE POLITICAL ORIENTATIONS OF TEACHERS*

Mark B. Ginsburg and Sangeeta G. Kamat

Teachers work and live within unequal relations of power. Capitalism, patriarchy, racial or ethnic group stratification, authoritarian religious or secular state formations, or imperialism are imbedded not only in local, national and global communities but also in teachers' immediate work sites (classrooms and campuses) as well as in the educational system more generally. What teachers do in and outside their workplaces is dialectically related to the distribution of both a) the material and symbolic resources and b) the structural and ideological power used to control the means of producing, reproducing, consuming, and accumulating material and symbolic resources.

In these terms teachers can and should be considered as political actors (Carlson, 1987). At its core politics consists of power relations. Politics "concerns the procedures by which scarce resources are allocated and distributed... [and the struggles] between groups who uphold and those who challenge the status quo" (Dove, 1986, p. 30). Teachers are engaged in political action in their pedagogical, curricular, and evaluation work with students in classrooms and corridors; in their interaction with parents, colleagues, and administrators in educational institutions; in their occupational group dealings with education system authorities and state elites, and in their "citizen" roles in local, national, and global communities.

It is sometimes believed that teachers can and should be apolitical (cf., Zeigler, 1967). Such a belief rests partly on a distinction between professional or technical activity and political action. A related foundation for this belief is the contrast between personal and political matters or between activity in the public versus the private sphere (Weiler, 1988). Teachers' work is thus characterized as professional or technical, involving personal relationships among individuals in the private sphere of the classroom or school. From this perspective, it is atypical or undesirable for "professional" teachers to venture into the public sphere, either the educational system as members of organizations or the community as members of political parties or social movements.

The alternate perspective on which this chapter is based views teachers as political actors regardless of whether they are active or passive; autonomous or heteronomous vis-a-vis other political forces/groups; conservative or change-oriented; seeking

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individual, occupational group, or larger collectivities' goals; and/or serving dominant or subordinate group interests. The literature reviewed here sheds light on the various ways in which teachers can be understood as political actors in different historical periods in various societies. The discussion is organized around the following loci of action: classrooms, educational institutions, teacher organizations, and communities.

Political Work in Classrooms

Giroux (1988, p. 126) states that

[r]ather than being objective institutions removed from the dynamics of politics and power, schools actually are contested spheres that embody and express a struggle over what forms of authority, types of knowledge, forms of moral regulation and versions of the past and future should be legitimated and transmitted to students.

Thus, teachers' curricular, pedagogical, and evaluation activity are viewed as forms of political action, activity having consequences for power relations and the distribution of material and symbolic resources. For reasons of space constraints the focus here is on curriculum choices, although similar issues could be developed in relation to pedagogy (e.g., Connell, 1985; Lawn & Grace, 1987; Popkewitz, 1998) as well as evaluation activity (e.g., Dove, 1986; Jansen, 1990; Weiler, 1988).

Curriculum represents a selection of topics and a selection of ways of viewing these topics. Power relations are imbedded in curriculum both in terms of who makes the decisions and whose interests are served by the topics and perspectives included or excluded. The content of the curriculum is emphasized here, but it should be remembered that the process of constructing the curriculum is a power struggle in which teachers play a more or less active role. While teachers generally do not have full autonomy to officially determine the curriculum, they do chose to accommodate to, resist, or create alternatives to the curriculum determined by others (Apple, 1986; Apple & Buras, 2006; Ginsburg, 1988; Ozga, 1988).

The knowledge included in or excluded from the curriculum may legitimate or challenge existing relations of powers; curriculum is not neutral. A variety of studies in North America have shown how capitalist relations are preserved by promoting its "positive" features, ignoring or rationalizing as individuals' failings its negative features, or limiting what is known about groups who have struggled to create a more just and humane economic arrangement (cf., Zeigler, 1967). In contrast, Sultana (1991) reports how some teachers in New Zealand, who were active in social movements, developed their curriculum to stress the exploitation of workers and indigenous groups under capitalism and the role of trade union activity and class and ethnic struggle in seeking to change or transform the system. Myers (2007) reports similar findings based on his research on civic education teachers who were active in political parties, unions, and social movements in Brazil.

Studies in a range of societies have documented how unequal gender relations have been legitimated through the knowledge that teachers include in or exclude from the curriculum, portraying in an unproblematic manner males' paid labor and dominance in the economy and government and females' unpaid labor with respect to family care and house maintenance. Other (feminist) teachers have engaged in problematizing gender relations, developed or used anti-sexist curricular materials, focused attention on how patriarchal relations limit females' (and males') lives, and encouraged students to consider alternatives to stereotyped gender roles in schools and society (Lawn & Grace, 1987; Weiler, 1988).

Teachers have developed and/or transmitted curricular knowledge that has either supported or undermined unequal racial/ethnic group relations. For example, in South Africa some teachers have promoted racist stereotypes and ideologies in their classrooms, while others have sought to "redefine curriculum content from its racist, sexist, and classist bias to the emancipatory goal of social relevance, political liberation, and social equality" (Jansen, 1990, p. 67). Jarausch (1990) reports similar efforts by different groups of teachers in Nazi Germany to legitimate and critique racial stereotypes and ideologies. And especially politically activist teachers in Canada in the late-1990s encouraged to their students to critically examine inter-ethnic group relations and adopt a progressive multiculturalist agenda (Myers, 2007).

What knowledge and perspectives teachers communicate to students may encourage supporting or critiquing governing elites and their actions, including decisions to engage in international warfare. During World War I teachers, affiliated with the revolutionary sindicalist movement in France, challenged French a uthorities and sought to replace positive and romantic views of war with a view of it as barbaric, destructive, and not resolving anything (Feeley, 1989). In the 1920s teachers in "reading rooms" in rural areas helped to promote support for Bolshevism in the Soviet Union (Sumf, 2006). There is also evidence that during World War II teachers waged "spiritual warfare for the fatherland" (Jarausch, 1990, p. 29) in Germany, carried out "ultranationalist indoctrination" for the military regime in Japan (Blum, 1969), and implemented curricular changes dictated by central government officials needed to support the war effort both materially and ideologically in England (Lawn & Grace, 1987).

The concept of "cultural imperialism" seems useful in describing teachers' role in legitimating colonial and neo-colonial rule through their curriculum choices. Such political activity by teachers has occurred before as well as after "independence" in African societies (Bagunywa, 1975). And in the Philippines many teachers, who were tightly controlled through training, curriculum guides and inspection, transmitted the technical and cultural knowledge and skills required by the U.S. colonial rule there (Canieso-Doronila, 1987). There is also contrasting evidence of teachers' curricular work challenging imperialism. For example, rural teachers in Vietnam, despite similar efforts by French colonial authorities to impose a curriculum that met the needs of the colonizing power and denigrated Vietnamese culture, resisted and developed a curriculum which criticized French Colonialism and celebrated Vietnamese culture and their capacity for self-rule (Kelly, 1982).

Institutional Politics: The Politics of the Workplace

That teachers are workers and educational institutions are work places is generally agreed (Connell, 1985; Ozga, 1988). And like those employed in other organizations, teachers, administrators and others who work in schools are enmeshed in interpersonal

or micro politics, involving the tactical use of power to seek and maintain control of material and symbolic resources (Blase, 1991). At the same time, because education and educational workers are a part of the broader set of social relations, life in schools constitutes and is constituted by macro as well as micro power relations, particularly in terms of class and gender.

In England different groups of teachers, those whose careers are tied to academic subjects versus those identified with pastoral care or counseling responsibilities, have competed for material resources (salary levels and program funds), symbolic resources (status and recognition) and power to shape the direction of their schools (Ozga, 1988). Collegial relations among teachers in the U.S. are seen to involve strategies to acquire or protect symbolic resources, such as status and psychic rewards that come from feelings of success in working with students. Diplomatic friendliness, avoiding controversy and conflict, and mutually recognizing the sanctity of individual teachers' classrooms enable teachers to survive and obtain some level of satisfaction and control by retreating from the larger institutional setting that might otherwise be openly laden with struggles over material and symbolic resources (Blase, 1991). And although teachers' retreat into the security of the classroom or "prisonhouse" is a creative strategy, it is one that likely allows miseducative and inequality-reinforcing aspects of the system to go unchallenged (Lawn & Grace, 1987).

Research in Australia, England and the U.S. has illuminated how administrative power over teachers has been constructed, accommodated, and resisted (Smyth, 1987). Focusing on the context of Latin America, Oliveros (1975, p. 231) makes clear that these power struggles have implications for material resources, including employment, salary and promotions, in that teachers "depend on the goodwill of their supervisors... to remain [and advance] in the profession [and] that goodwill in turn is paid for in loyalty and by 'not creating problems.'"

Power relations between teachers and administrators reflects in part the struggle over the educational labor process. Several studies in Canada, England, and the U.S. have focused on the sometimes contested developments through which many teachers have become proletarianized (their work has been deskilled and depowered) and how some teachers have become professionalized (their work has been reskilled and repowered) (Ginsburg, 1988; Ozga, 1988). Through such a lens it becomes apparent that administrator-teacher relations reflect and have implications for class relations. And given the gender regime of schools where often men manage women, administrator-teacher relations also constitute a terrain on which patriarchy is reproduced and struggled over (cf., Apple, 1986; Connell, 1985).

Teacher Organizations and Political Work

Teachers all over the world have formed associations and unions, at least in part as a collective response to their shared experiences as employees involved in the politics of educational workplaces. In a variety of European, North American, and "Third World" societies teachers comprise the highest organized category of workers (Dove, 1986; Leiulfsrud & Linblad, 1991).

Teacher organizational activity is political in the sense that it involves relations with national and local states to shape the distribution of material resources to teachers (versus other groups). Teachers have worked through their organizations to demand and/or obtain higher salaries, pensions or other material benefits (Blum, 1969; Feeley, 1989; Lawn & Grace, 1987; Oliveros, 1975; Ozga, 1988; Seifert, 1989; Warren, 1989). However, sometimes teacher organizations have passively accepted or even legitimated the decisions of state elites (Ginsburg, 1991; Rosenthal, 1969).

Part of the collective political activity of teachers has been concerned with winning the right to organize and engage in negotiations with the state, collective bargaining, strike and other forms of "militant" action (Feeley, 1989; Kelly, 1982; Skopp, 1982). At various times in many societies it has been illegal for teachers to withhold their labor. Historically, in Japan teacher unionism was repressed by the government before World War II, encouraged by the U.S. and allied occupying forces and the Japanese Socialist government from 1945 to 1948, and then undermined when the Conservative Party assumed power in 1948 (Blum, 1969).

Teacher organizations have also struggled with local and national state elites, educational administrators, parents, other citizens as well as other teacher organization over issues of power, control and autonomy. Such struggles have concerned the capacity to determine working conditions, teachers' responsibilities and management practices; pedagogy and curriculum, examination systems; teacher appraisal systems; educational policy, salary determination mechanisms; and level of funding for education in general (Blum, 1969; Ginsburg, 1991; Lawn & Grace, 1987; Oliveros, 1975; Ozga, 1988; Rosenthal, 1969; Seifert, 1989; Skopp, 1982; Warren, 1989). Under conditions of rapid economic liberalization and the resultant international definition of education as a "service" that can be "traded," teacher unions have broadened their struggles from focusing only on local or national issues to also mobilizing in relation to international policy developments, such as the threat of the General Agreement in Trades in Services (GATS) to public education (ESI and PSI, 2002; Kelsey, 1997; Konings, 2004).

Organized teachers have also engaged in political action in relation to the state to obtain symbolic resources, such as professional status or *berufstand*, associated with university-based preparation (Dove, 1986; Ginsburg, 1991; Jarausch, 1990; Lawn & Grace, 1987; Nwagwu, 1977; Skopp, 1982). Such status symbols have been seen to be valuable assets in teachers' (and other educated workers') professionalization projects, in which increased power/autonomy and remuneration are also sought. While state action has sometimes functioned as a catalyst for or reinforced teacher professionalization, teachers have also been the targets of deprofessionalization or proletarianization efforts by the state.

A major ideological weapon used by both teachers and the state in such struggles, at least in Britain and former British colonies, is "professionalism." And while there are multiple and contradictory meanings of the term, professionalism, both in social scientific literature and in everday discourse, the notion of a hierarchical division of labor, legitimated by a meritocratic conception of educational attainment, is often a central element. In drawing on and reproducing this ideology, teachers help to legitimate a division of labor needed by at least capitalist relations of production (Ginsburg, 1988). This tendency is strengthened due to the fact that some conceptions of professionalism

distinguish professionals' organizational efforts from the "unionism" of members of the working class (Ginsburg & Chaturvedi, 1988; Ozga, 1988). This is part of the reason why in some societies the issue of teachers being affiliated to the broader labor movement stimulates such controversy, even though organized teachers have played a major leadership role in the labor movement in certain societies (Blum, 1969; Feeley, 1989; Ginsburg, 1991).

Race relations have also affected and been shaped by the discourse and action of organized teachers. For instance, Lyon and Migniuolo (1989) conclude that the interests of black teachers in England were less well served by the various teacher unions and associations during the 1970s and 1980s, although the National Union of Teachers has developed materials to be used by teachers in the classrooms to encourage mulitculturalism and combat racism. And through the 1940s in the United States teachers' organizations were racially segregated, and many organized white teachers did not play a supportive role to the black teachers' organizations' struggles for equal pay (Warren, 1989). Moreover, there are instances, such as the struggle by organized teachers in New York City in 1968 against black community efforts to control their schools locally, which indicate that teachers' desire for professional autonomy are not likely to be neutral with respect to the distribution of power among racial groups.

Teacher organizations' activity is also political with respect to perpetuation and challenging gender relations. There is evidence that the predominantly male secondary teacher organization in Germany sought to achieve and maintain professional status for their members by excluding and distancing themselves from corps of predominantly female primary teachers (Jarausch, 1990). In England teacher organizations have tended reflect male approaches to dealing with issues accorded more importance by male than female teachers, while ignoring concerns, such as child care and domestic responsibilities, which affect women more than men (Lyon & Migniuolo, 1989). There is historical evidence from England, France, and the United States of some teacher organizations struggling for, with others working against, equal pay for male and female teachers (Feeley, 1989; Lyon & Migniuolo, 1989; Warren, 1989). Moreover, while it is the case that women have served in leadership roles in teacher organizations in some societies, it is well documented that females are underrepresented in high positions in teacher organizations in even the same countries (Lyon & Migniuolo, 1989; Warren, 1989; Weiler, 1988; Zeigler, 1967). This point, however, must be qualified in that male and female teachers may play different, yet active and essential role in organizing collective action, such as strikes (Lawn & Grace, 1987; Stevenson, 2005, Weiler, 1988).

Political Work in the Community

Individually and through their associations and unions, because of either the dictates of political and economic elites or their own values and convictions, teachers have come to play an active political role in the community. And while we will focus here on examples of active participation, we should remember that nonparticipation is also a political act – a point illustrated by the fact that governments have at times

sought to restrict certain types of teachers' community-based political action (Blum, 1969; Dove, 1986; Jarausch, 1990; Zeigler, 1967).

In Africa, Asia, Europe, and Latin America teachers have played leadership and other activist roles in nationalist, independence movements and anti-colonial or anti-imperial struggles (Blum, 1969; Dove, 1986; Kelly, 1982; Lauglo, 1982). Teachers have also been prominent actors in revolutions, such as in China (White, 1981), France (Feeley, 1989), Mexico (Blum, 1969), and Russia (Seregny, 1989) during the early decades of the twentieth century as well as in recent years in Cote d'Ivoire and Hungary (Ginsburg, 1991). As Jansen (1990, p. 63) reports about his own and colleagues' experiences in the revolutionary context of South Africa, at "moments of student-teacher-police confrontation [we] made the transition from the technocratic teacher to political activist and, on occasion, to comrade in armed struggle."

More generally, teachers have served as community leaders animateurs, and agents of social change (Dove, 1986; Lauglo, 1982; Watson, 1983). Sometimes they have challenged the political and cultural hegemony of dominant groups and other times they have operated as agents of state and economic elites. Similarly, teachers have functioned as mediators between national state elites and the local citizenry, while trying to find space for autonomous action in the middle of a conflict between a secular state and the church (Blum, 1969; Meyers, 1976; Skopp, 1982). Dove (1986) concludes that teachers more often served in community leadership roles during the pre- and immediate post-independence periods in developing countries than more recently, and Lauglo (1982) reports that historically European and North American rural teachers have varied widely in the extent they served performed such roles. In both cases the relative level of education of teachers compared to community members is seen as the key variable, with teachers being more active when they are more educated than community members.

In a variety of contexts heads of state, legislators, and other government officials worked as teachers at one point of their lives (Berube, 1988; Dove, 1986; Jarausch, 1990; Lawn & Grace, 1987; Nwagwu, 1977). Teachers have also been leaders of political parties as well as being over-represented, compared to other occupational groups, as active party members (Ginsburg, 1991; Leiulfsrud & Linblad, 1991). To varying degrees individual and organized teachers devote time to lobbying and candidate electoral work (Blum, 1969; Warren, 1989; Zeigler, 1967).

Teachers' community-based political work has focused on a variety of issues and has reflected ideological positions on the left as well as the right (González & Kamwirth, 2001). There is evidence that teachers in the US and Britain have been active members in the feminist and civil rights movements fighting for universal suffrage, emancipation, racial desegregation, as well as tax reform (Lawn & Grace, 1987; Warren, 1989). In contrast to these more progressive actions, secondary school teachers, who had not been purged from their organization, endorsed the Nazi regime in Germany in 1933. Jarausch (1990) also indicates some teachers took a public stand against the Nazi's fascist and racist project, while others rationalized their duty to at least make minimal concessions to Hitler's demands.

During this same period teachers in Germany and England contributed time and energy to community-based work to support opposite sides in the effort (Jarausch, 1990;

Ozga, 1988). Teachers have also become involved in anti-militarist, peacemovements as in the case of Japanese teachers after the second world war (Blum, 1969) and French primary school teachers at the time of World War I (Feeley, 1989).

Conclusion

What actions teachers engage in (or abstain from) in classrooms, educational institutions, teachers organizations, and communities can be viewed as political. And although we have discussed each separately, these arenas in which teachers engage in political action should not be treated as separate or unrelated. For example, in a variety of countries teachers' involvement in community-based social movements may be reinforced or contradicted by how they select and organize curriculum knowledge. Being active or inactive in the community may be related to focusing students' attention on or ignoring inequalities, exploitation, and oppression and the role subordinate groups play in challenging such relations of power (Blum, 1969; Connell, 1985; Kelly, 1982; Sultana; 1991; Zeigler, 1967).

In discussing the political work of teachers we have tried to keep in mind that teachers are not a homogeneous groups, and thus have been careful to search for multiple means and ends of teachers' political work. Although some patterns and similarities obtain across a range of countries, over time, and among different groups of teachers in the same location and time period, there are also important differences internationally, historically, and intra-occupationally.

This chapter has emphasized international comparisons, but historical comparisons are also instructive. For example, it has been noted that the relations between organized teachers and the state have varied across different historical periods in Britain, Cote d'Ivoire, Germany, Hungary, Japan, Mexico, and the United States, respectively (see Berube, 1988; Blum, 1969; Ginsburg, 1991; Jarausch, 1990; Lawn & Grace, 1987).

Divisions among teachers and their organizations also make general statements about their political work problematic. In a range of societies there are examples of teacher organizations fractionated by gender, race/ethnicity, social class-related differences in the level of the educational system in which their members work or were educated, subject matter taught, regional location, religious identification, political ideology or party affiliation, militancy and orientation to alliances with other groups of organized labor (Blum, 1969; Feeley, 1989; Ginsburg, 1991; Lawn & Grace, 1987; Jarausch, 1990; Lyon & Migniuolo, 1989; Nwagwu, 1977; Ozga, 1988; Warren, 1989; Zeigler, 1967).

Given the diversity among teachers in one setting during any particular period, let alone across time and place, it is likely that teachers (as a general category of worker/ citizens) have engaged and continue to engage in a wide range of (active and inactive) forms of political work. The variation among teachers also means that the consequences of the political work by different groups of teachers may sometimes reinforce and other times challenge the existing distribution of material resources, symbolic resources, and power among various groups from local to global levels. Moreover, because of the contradictions in power relations that are constitutive of and constituted by teachers' individual and collective action, it may often be the case that a given teacher in a given time and place operates in a manner, for example, that serves partially the interests of both dominant and subordinate groups. The issue to be addressed, therefore, is not whether teachers should be political actors, but for what ends, by what means, and in whose interests should teachers engage in political work.

Biographical Notes

Mark B. Ginsburg is a teacher education, organizational reform, and evaluation/ research specialist at the Academy for Educational Development (USA). He served on the faculty at the University of Aston in Birmingham (England, 1976–78) and the University of Houston (Texas, USA, 1978–87), and from 1987–2004 he was the Director of the Institute for International Studies in Education and Professor of Education at the University of Pittsburgh (Pennsylvania, USA). He has published extensively on topics of teacher education, teachers' work and lives, policy/institution reform, and policy/practice-oriented research and evaluation. His publications include: *Contradictions in Teacher Education and Society* (1988), *Understanding Educational Reform in Global Context* (1991), *The Politics of Educators' Work and Lives* (1995), *The Political Dimension in Teacher Education* (1995), *Cuba in the Special Period: Cuban Perspectives* (1997), and *Limitations and Possibilities of Dialogue among Researchers, Policy Makers, and Practitioners* (2003).

Sangeeta Kamat is an Associate Professor in the Department of Education Policy, Research, and Administration, School of Education, University of Massachusetts – Amherst. Her research focuses on issues of state, civil society, globalization, and educational policy in the Third World. In addition to articles published in Comparative Education, Cultural Dynamics, Development, Globalization, Societies and Education, Harvard International Review, International Journal of Qualitative Studies in Education, Review of International Political Economy, her publications include the book, *Development Hegemony: NGOs and the State in India* (Oxford, 2002)

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DIMENSIONS OF QUALITY IN TEACHER KNOWLEDGE

Michael J. Lawson, Helen Askell-Williams, and Rosalind Murray-Harvey

Introduction

In the media, in government and in research literature there is a strong view that we need high quality teachers. In Australia, the Federal Minister for Education, Science and Training recently made her government's views clear: "I am committed to ensuring that every child in Australia, wherever they attend school, have access to a high quality education, with high quality teachers in a high quality environment" (Bishop, 2006). In the United States of America, a recent report from the *new* Commission on the Skills of the American Workforce identified the need to recruit more high quality teachers as a key component in a recommended revamp of the US education system (NCEE, 2006). The official documents associated with the No Child Left Behind Act in the US also have a focus on improving teacher quality (U.S. Department of Education, 2007) in addition to a major concern with ensuring that "highly qualified" teachers are available in all classrooms. And the vision of the United Kingdom Department for Education and Skills is that its recent National Strategies will "transform the quality of learning and teaching to benefit all children and young people in all phases and settings" (U.K. Department for Education and Skills, 2006, Purpose vision and strategic aims para. 2).

The belief in the importance of high quality teaching in these policy statements is supported by recent research reviews. The Organisation for Economic Development and Cooperation made such a belief clear in the title of a recent report, *Teachers Matter* (OECD, 2005). The critical nature of teacher quality for student learning is articulated strongly in that report: "The research indicates that raising teacher quality is perhaps the policy direction most likely to lead to substantial gains in school performance" (OECD, 2005, p. 23). This argument is reiterated in later sections of the report:

The broad consensus is that 'teacher quality' is the single most important school variable influencing student achievement...students of the most effective teachers (the highest quintile) have learning gains four times greater than students of the least effective teacher (lowest quintile). ... (OECD, 2005 p. 26)

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Similarly, in his review of research on influences on student achievement in the USA, UK and Australia, Rowe (2002) made an equally strong argument:

When all other sources of variation are taken into account, including gender, social backgrounds of students and differences between schools ... by far the most important source of variation in student achievement is teacher quality. (Executive Summary, para. 1)

There is therefore a strong basis for developing the quality of all teaching. But what is it that we should be developing and maintaining? Is it possible to identify the dimensions that make up teacher quality? Is it possible to make judgments about variations in these dimensions? In this chapter we set out the case for answering "Yes" to these questions, using teacher knowledge as an example.

Representing the Quality of Teaching

How can we make judgments about quality in teaching? One productive direction to pursue is to represent teaching as action. Teachers act – they say things, do things, prepare materials, present materials to students, interact with students, and assess students' work. In making judgments about the quality of teaching it is therefore necessary to evaluate such teaching actions. In an important paper, Kerr (1981) developed an analysis of teaching as *intentional* action. Building on the theory of action developed by Danto (1973), Kerr argued that a teaching action consisted of three ordered actions: (a) making a choice of a learning to encourage; (b) designing a plan to encourage that learning; and (c) acting on that plan. Later, Fenstermacher and Richardson (2005) suggested that teacher intentions and actions are, by themselves, insufficient for identifying quality teaching, so that it is necessary to add students' learning outcomes to the actions identified by Kerr (1981). These four sets of actions are seen to provide a comprehensive account of teaching. Although we will restrict our concern in this chapter to teacher knowledge, the framework we propose could be useful for examination of all four sets of teaching actions.

Kerr developed her analysis of quality teaching by proposing two "tests of quality," or adequacy, of a teaching action. A judgment of *subjective adequacy* can be made if a teacher's teaching actions are consistent with his or her beliefs and values. Judgment of *objective adequacy*, on the other hand, is made against the "beliefs and values of the knowledge community and of the political and moral context" (Kerr, 1981, p. 78). With respect to this latter test, Kerr proposed that adequate teaching actions should show that the teacher makes use of the best available knowledge in a number of areas, including knowledge about subject matter, learning, learners, resources and strategies, and the political and moral context. Thus, teachers' beliefs and knowledge, and the related beliefs of the educational knowledge community, are key sources of data for judgments of quality.

The Status of Teacher Knowledge

The status of teachers' beliefs and knowledge is not straightforward: There is a large body of research on teachers' beliefs or understandings, stories, intuitions and other knowledge elements (e.g., Calderhead, 1996; Munby, Russell, & Martin, 2001;

Putnam & Borko, 1997). As knowledge claims, these various knowledge elements need to have what Fenstermacher (1994) termed a reasonable degree of epistemic merit. That is, they must be able to be subjected to, and emerge well from, reasonable examination of their overall warrant, through examination of the basis for the belief or understanding. Similarly, in Phillips' (1997) terms, there must be consideration of the extent to which any of these knowledge claims is true. This raises the question, "What are the characteristics of such knowledge if it is to be regarded as having a reasonable degree of epistemic merit?" The framework described in a later section of this chapter is advanced as one way of making progress in establishing the epistemic merit of teacher knowledge. Before we set out the basis for that framework, we will briefly refer to the large body of work on the various categories of knowledge that teachers are expected to possess.

Categories of Knowledge About Teaching

The complex nature of teaching requires that teachers possess knowledge in diverse fields. Kerr's (1981) identification of different categories of knowledge, described above, that could be used to make judgments of objective adequacy, anticipated subsequent analyses of teacher knowledge. For example, Shulman (1986a, 1986b, 1987) created a classification system of seven types of teacher knowledge that continues to be influential. Shulman's categories include content knowledge; general pedagogical knowledge; curriculum knowledge; pedagogical content knowledge; knowledge of learners and their characteristics; knowledge of educational contexts; and knowledge of educational ends, purposes and values, and their philosophical and historical grounds. Another classification system, containing three categories, was proposed by Borko and Putnam (1996). The first category, general pedagogical knowledge, includes knowledge about self and teaching, learners and learning, and classroom management. The second category is knowledge and beliefs about subject matter. The third category is pedagogical content knowledge and beliefs, which includes epistemological issues related to teaching particular subjects, knowledge of instructional strategies, and knowledge about how to teach such knowledge. Borko and Putnam's categories reflect the strong influence of Shulman's categories.

Calderhead (1996) also classified teachers' knowledge and beliefs. Calderhead's knowledge categories included subject knowledge, craft knowledge, personal practical knowledge, case knowledge, theoretical knowledge, metaphors and images. His beliefs categories included beliefs about learners and learning, teaching, subject, learning to teach, and self and the teaching role.

The different schemes for dividing up the complex body of teacher knowledge noted above, and more recent schemes set out by Hill, Schilling, and Ball (2004) and Darling-Hammond (2006), are essentially refinements and re-packagings of the original Shulman scheme. With the addition of Grossman's (1995) "knowledge of learning" category to Shulman's original list, we regard an expanded-Shulman set of categories as a sound basis for representing the range of teacher knowledge.

We will now turn to consider the criteria that can be established to judge the quality of knowledge. To make this task manageable, we will focus on the category "knowledge

of learning." Although not all of the research we review has had an explicit focus on *teachers*' knowledge, the research is of relevance because it has been concerned, in some way, with judgments of the quality of knowledge.

General Descriptions of Characteristics of Knowledge Quality

There is a considerable body of research that has generated characteristics of good quality knowledge in general and of good quality teacher knowledge in particular. In much of this research, references to the quality of knowledge have been indirect, or restricted in scope, or general in nature. In a smaller group of studies there has been a direct focus on specific dimensions of quality. The findings from both sets of research are valuable for our purposes. However, a major shortcoming of this research is that the characteristics identified as indicative of good quality knowledge are not established within a coherent framework.

Studies of teaching expertise make claims about quality, based on the reasonable assumption that expertise is a reflection of good quality knowledge. For example, Leinhardt and colleagues' (Leinhardt & Greeno, 1986; Leinhardt & Smith, 1985) micro-level studies of the pedagogical practices of expert mathematics teachers identified areas of teaching action in which differences in quality can emerge. Similarly, Berliner (2004) described relationships between expert teaching and student learning outcomes. Berliner's research generated a set of general descriptors of expert teachers that point to a variety of different dimensions of quality. These descriptors include "better" use of knowledge, "better" problem solving strategies, "better" adaptation of goals, "better" decision making, "better" perception, "extensive" pedagogical content knowledge, and "greater" sensitivity (p. 209). Berliner also made reference to "automaticity" and "routinization" of knowledge, as well as to knowledge that was "opportunistic," "flexible," "situated," "extensive," and "accessible" (pp. 200-201). In a similar vein, Gess-Newsome (1999, p. 53) asserted that effective teachers "must hold deep and highly structured content knowledge that can be accessed flexibly and efficiently for the purposes of instruction" (emphasis added). All of these descriptors are clearly advanced as markers of quality. So how are we to understand evaluative terms such as "better" or "highly structured" or "deep"? Several streams of research have addressed this issue by specifying different dimensions of knowledge quality.

Specifications of Dimensions of Quality of Knowledge

Analyses of knowledge in a range of different areas of learning and teaching have specified dimensions for making judgments of quality of action. First, there is a quantitative dimension of good quality knowledge. For example, one of the dimensions of knowledge quality identified by White (1979) was "extent" of knowledge. Mayer (1975) also proposed that differences in learning outcomes were related to the quality of

connectedness of learners' knowledge, with one dimension of connectedness being the number of new knowledge nodes acquired by the learner during a learning event. Similarly, Sweller (1991, p. 81) wrote that a competent problem solver "turns out to be a person with a large number of schemas allowing the classification of problems and problem states." And as Stodolsky argued (e.g., Stodolsky, 1988), a good quality teaching action will be associated with the size of the teacher's knowledge base: A more extensive knowledge base allows teachers to make progress in a wider range of problem situations.

Quality is also represented in the literature on research into conceptions of teaching and approaches to learning. In these strands of research, one side of a dichotomy is typically regarded as being of higher quality than another: Deep approaches are of higher quality than surface approaches (e.g., Biggs, 1987); the top-level conception in a hierarchy is of better quality than lower-level conceptions (e.g., Marshall, Summers, & Woolnough, 1999), and; intentions and strategies can be arranged along a continuum, ranging from teacher focused to student focused, the latter implying better quality (Trigwell, Prosser, & Taylor, 1994).

Research into "depth of processing" also implies differences in the quality of knowledge. Early depth of processing researchers proposed qualitative differences between physical and semantic processing, with the latter requiring more abstract and interrelated thinking (e.g., Craik & Lockhart, 1972). More, recently Hmelo-Silver and Pfeffer (2004) described three categories of classification of knowledge ranging from more readily visible structures and behaviors through to more abstractly conceived functions. Hmelo-Silver and Pfeffer posited that differences between novices, avid hobbyists and experts can be understood in terms of whether a system is described in terms of perceptual features, behaviors of elements, or a hierarchical, integrated model, with the latter representing better quality knowledge. In a similar vein, Chi and Roscoe (2002) proposed that if people initially misclassify objects or events, this can lead to misconceptions that are robust and resistant to change, thus affecting the quality of knowledge that can be created. Chi and Roscoe proposed three categories of classification, namely, entities, processes and states. For example, naïve students tend to misclassify temperature as an entity, when it is, in scientific understanding, a process. Once a construct is misclassified, then new instruction about that construct will also be placed in the wrong category, preventing the development of a better quality understanding.

However, approaches to, and conceptions of, learning, or depth of processing, or elaboration, or classification, typically provide singular, relatively narrow perspectives on knowledge quality: Other researchers have generated more multidimensional descriptions of quality.

The Structure of Observed Learning Outcomes (SOLO) taxonomy developed by Biggs and Collis (1982) identified four dimensions of quality in learning outcomes: (1) capacity, which referred to working memory; (2) relating operation, which referred to the way in which an instructional cue and the student's response were interrelated; (3) consistency and closure in relating data and conclusions; and (4) structure, which represents the relations between cue, data and response(s). The SOLO dimensions can be readily applied to both student and teacher knowledge (Boulton-Lewis, 1994, 1995).

A multidimensional perspective of knowledge quality was proposed by White (1979) and White and Gunstone (1980). White's initial dimensions of quality of memory structure were (1) extent, (2) precision, (3) internal consistency, (4) accord with reality, (5) variety of types of memory element, (6) variety of topics, (7) shape, (8) ratio of internal to external associations, and (9) availability. White's work was seminal in the breadth of its consideration of dimensions of quality, with many of those dimensions only recently becoming the subject of detailed attention.

Since their early papers, White and Gunstone (1992) and others (e.g., Martin, Mintzes, & Clavijo, 2000; McKeown & Beck, 1990) have made progress with modeling cognitive structure using techniques such as concept mapping. Similar progress has been made in the analyses of internal and external connectedness between nodes in the memory network as discussed by Mayer and Greeno (1972), and employed in investigations of the structural complexity of teacher knowledge by Chinnappan and Lawson (2005).

The two-dimensional revision of Bloom's early Taxonomy of Educational Objectives by L. W. Anderson and Krathwohl (2001) relates qualitative orderings of processing events¹ to types of knowledge representations.² Thus the revised Bloom taxonomy can be also used to identify variations in the quality of knowledge. The design of this taxonomy reflects the many different types of knowledge representations that have emerged in recent research, as documented by Munby, Russell, and Martin (2001), including inter alia, situated knowledge (Wenger, 1998); knowing-in-action and personal practical knowledge (Schön, 1988); declarative and procedural knowledge (J. R. Anderson, 2005); fact- and rule-based knowledge (Chi, 1985); semantic and episodic knowledge (Tulving, 1972; Tulving & Craik, 2000); conceptual and procedural knowledge (Hiebert, Gallimore, & Stigler, 2002); metacognitive knowledge (Flavell, 1979; Hacker, Dunlosky, & Graesser, 1998); and domain expertise and topic specific knowledge (Sternberg, 1999).

There is quite a degree of overlap in these types of knowledge representations. For example, factual, or declarative knowledge, is also likely to be highly situated, at least in the early stages of knowledge acquisition. Again, episodic knowledge is, by definition, situated knowledge, being distinguished by recollection of personal involvement in the events of interest. And rich knowledge might include analogies, concrete examples, definitions of concepts and explanations of rules (White & Mayer, 1980, p. 106).

Other multidimensional descriptions of knowledge quality have been advanced in work by McKeown and Beck (1990) and by Hogan and colleagues (Hogan, 1999a, 1999b; Hogan & Fisherkeller, 2000; Hogan & Maglienti, 2001; Hogan, Nastasi, & Pressley, 2000). McKeown and Beck (1990, p. 689), in their investigation into the quality of students' knowledge of a topic in history, argued that "there are many subtleties in the character and arrangement of individuals' knowledge." The "subtleties" that McKeown and Beck identified were a mixture of quantitative and qualitative characteristics of knowledge, including, measures of correctness of responses; quantity of major ideas; quantity of elaborative ideas; and the nature of the relationships between ideas and the organization of ideas.

In a series of studies, Hogan and colleagues rated the quality of students' learning actions. Hogan's dimensions of quality included, coherence with prior beliefs, knowledge and values [similar to Kerr's (1981) subjective adequacy]; generativity of topics and sub-topics produced; degree of elaboration of a topic; specificity, or precision of knowledge about a topic; presence and adequacy of justification; presence and adequacy of explanation; scope of knowledge [like White's (1979) extent]; degree of synthesis, [similar to Biggs and Collis (1982) consistency and closure]; and logical coherence.

It is apparent that many of the different frameworks reviewed herein cover broadly similar ground. However, although these specifications of dimensions of quality of knowledge constructions, or of knowledge use, are valuable for establishing the scope of the domain, they do need to be more explicitly organized. In the next section we propose a framework that brings these different dimensions of knowledge quality into a more coherent structure.

A Way Forward: Bringing Coherence to the Domain

We propose that it is possible, and useful, to organize the various suggested indicators of good quality knowledge into a macro-level, Quality of Knowledge Framework (QKF), containing five categories: (1) well-foundedness, (2) structure, (3) complexity, (4) situational affordances and constraints, and (5) types of cognitive representations. The five categories are designed to consolidate the main indicators of good quality knowledge reviewed in this chapter, thus providing a structured basis for future research. The framework is described in detail in Askell-Williams (2004), and a brief explication of each category is presented below.

Well-Foundedness

In White and Gunstone's (White, 1979; White & Gunstone, 1980), Biggs and Collis' (1982), Hogan and Fisherkeller's (2000), Marton and Saljo's (1976a, 1976b), Kerr's (1981), Chi and Roscoe's (2002), and McKeown and Beck's (1990) work, there is concern to make explicit judgments about the correctness of propositions and also the correctness of relationships between propositions. This judgment of correctness, or well-foundedness, is made with respect to the degree of congruence between a person's knowledge and the knowledge of the relevant knowledge community. Well-foundedness can also be viewed from an internal perspective of congruence between individuals' knowledge/beliefs, intentions, and their plans and actions (Kerr, 1981).

Structure

A large body of research suggests a need to represent the connectedness or structure of knowledge as a dimension of quality, including the work of Mayer and Greeno (1972), Wittrock (1990), Martin, Mintzes, and Clavijo (2000), White and Gunstone (White, 1979; White and Gunstone, 1992), McKeown and Beck (1990), and Biggs

and Collis (1982). In this dimension, the structure of hierarchical and heterarchical configurations of knowledge elements (such as nodes, or concepts, or schemata) is the focus of interest. Both connectedness within a knowledge schema, and connectedness between different schema, are of interest (Mayer, 1975). In particular, well-organized and abstracted knowledge is considered to facilitate knowledge retrieval, and thus to confer substantial advantages for informed future actions (J. R. Anderson, 2005; Karmiloff-Smith, 1992).

Complexity

The range of characteristics identified by Hogan and colleagues' (Hogan, 1999a, 1999b; Hogan & Fisherkeller, 2000; Hogan & Maglienti, 2001; Hogan et al., 2000) and in Hmelo-Silver and Pfeffer's (2004) work, suggests that knowledge can differ in complexity. One teacher's knowledge might be limited to simple propositional relationships, while another teacher may provide more complex elaborations and justifications, perhaps through use of analogies and metaphors. Whereas the structure category, above, focuses on the arrangement of knowledge elements, this complexity category captures differences in the *nature* of the relationships that have been established between the knowledge elements. For example, analyzing, synthesizing and re-description suggest more complex knowledge relationships, while retelling is more simple.

Situational Affordances and Constraints

The extended abstract level in the SOLO taxonomy (Biggs & Collis, 1982), implies situational variation and generalization and transfer. Such issues have also been discussed by Perkins and Saloman (1994), Mayer and Wittrock (1996), and Bereiter (1997). Lave and Wenger (1991) and Sternberg (2000) have also highlighted the robust nature of knowledge gained through experiences and practice in diverse, authentic situations. Such knowledge is more robust, or of better quality, in the sense of being more widely applicable across a range of problem contexts.

Cognitive Representations of Types of Knowledge

White and Gunstone's (White, 1979; White & Gunstone, 1980) memory elements, J. R. Anderson's (2005) declarative and procedural knowledge, L. W. Anderson and Krathwohl's (2001) row categories, and the overview of knowledge types provided by Munby et al. (2001), suggest that knowledge can be held in diverse representations and that multiple cognitive representations are likely to be applicable across a wider range of problem situations than a single representation. As argued by White and Mayer (1980), it seems likely that a combination of types of knowledge representation would provide a quality dimension of richness, that would be superior to knowledge that is represented in only one way.

Operationalizing the Framework of Quality Knowledge

How might this quality of knowledge framework (the QKF) be operationalized? One example that is potentially applicable to an evaluation of teacher knowledge was provided by Askell-Williams and Lawson's (2006) use of the QKF to examine medical students' knowledge about teaching and learning. In that study, participants' interview transcripts were coded, using N6 (QSR, 2002), to indicators of the five categories of the QKF. Next, correspondence analysis (SPSS, 2001) was used to create graphic representations of individual student's knowledge profiles. Figure 1 provides an example of a profile of knowledge generated from the five categories of the QKF. The profile illustrates that it is possible to use the theoretical foundation established by the QKF to identify specific indicators of quality of knowledge about learning and teaching, and then to apply those indicators, at the micro-level, to an individual's knowledge. Such an analysis provides a more detailed account of variations in the quality of knowledge between individuals than is available from more general analyses associated with descriptors such as 'better' or 'deep.' The analysis also permits an advance in instructional utility, as it provides more specific indicators about knowledge quality than are available when characterizing a person as taking a "surface" or "deep" approach, or of adopting a "knowledge telling" or "knowledge transforming" conception. Instead, the peaks and troughs in the knowledge profile can provide guidance for acute "entry points for teaching" (Askell-Williams & Lawson, 2005), both for building upon relative strengths, (such as from Fig. 1, situational affordances and constraints) and for re-dressing relative weaknesses (such as with imagery, in Fig. 1).

Concluding Comments

We have proposed a procedure for examining the quality of teaching actions, starting with the quality of teachers' knowledge and intentions, their teaching plans, and their execution of those plans, and then moving on to consider the outcomes of teaching, as represented in student knowledge about learning and teaching. This brief review has shown that there is a range of indicators of knowledge quality that can be marshaled to address issues of epistemic merit in each of the four sets of teaching actions. These indicators, or dimensions, of quality have emerged from several different streams of research. We have identified a gap in the literature, in that there appears to have been few attempts to provide a coherent framework that might draw these diverse dimensions of quality together. To redress this gap, we have set out a quality of knowledge framework, which has potential to bring greater coherence to the field. The QKF can be applied to the different categories of knowledge both between and within individuals. Clearly there is a now a need to further examine the attributes of the QKF and the way that it can be used, that is, to consider further the epistemic merit of the framework itself.

We noted at the start of this chapter that there is much public discussion about the need to develop teacher quality and to develop teachers' knowledge. Specific




categories of teacher knowledge have grown to be particularly influential (Munby et al., 2001). For example, subject matter knowledge (Stodolsky, 1988) and pedagogical content knowledge (e.g., Gess-Newsome & Lederman, 1999) have received in-depth attention. It is apparent in the current debate associated with the NCLB Act in the United States that subject-matter knowledge has been given major prominence in discussions of what makes a teacher "highly qualified," such as in the recent Special Issue of the Harvard Educational Review (Chrismer, Hodge, & Saintil, 2006). Subject-matter knowledge is indeed one of the key types of knowledge that teachers must use when they act during teaching. However, when they act, teachers call upon more than just subject-matter knowledge.

Thinking about a teacher as being involved in generating actions before, during and after a classroom lesson makes obvious that the teacher needs to use different types of knowledge. The teacher might speak, or draw a diagram, or use a gesture, or ask a question, or show a demonstration, or elicit students' prior knowledge, or encourage students' self-efficacy for the subject, or do all of these things in discussing a part of subject-matter knowledge. So any use of subject-matter knowledge involves more than the subject-matter itself: Teaching is always "subject-matter plus." If subject-matter was all that was required for education then the need for teachers would diminish and all our students could just read the texts or websites we assigned. But as noted in the introduction, there is strong evidence that effective teachers make a difference: Good quality teachers value-add!

With regard to all categories of teacher knowledge, we believe that it is appropriate to take seriously Kerr's (1981) and Fenstermacher's (1994) advice about establishing the quality of teaching actions. This belief is based on the strong body of research evidence noted in the introductory section of this chapter. The brief review set out herein provides a framework that provides one set of criteria that might be used for significant teaching actions. This approach could be extended to both the knowledge and other actions of teachers, and to the knowledge and other learning actions of students. The calls for the raising of teacher quality that were noted in the introduction to this chapter establish a worthy broad goal. The key spheres of teacher action can be identified. The next challenge, and the one we have addressed here, is to make progress on judging the quality of action being taken within each of those different spheres. Moving in this direction will also require teacher educators, of both pre-service and in-service teachers, to examine the nature of the teacher-education courses required for certification and to work toward helping teachers to develop knowledge that can be seen to have reasonable objective adequacy in terms of Kerr's (1981) analysis. The dimensions of the QKF provide one basis for guiding judgments about such adequacy.

Biographical Notes

Michael Lawson is a Professor in the School of Education at Flinders University, Adelaide, South Australia. He is Leader of that university's Centre for the Analysis of Educational Futures. His research has focused on metacognition, problem solving and learning strategies. These topics have been pursued in areas of mathematics, language learning and teacher education. A recent focus of this research has been on the quality of knowledge students have about learning, learning strategies and ways to learn in classroom activities, including knowledge that students have about self-directed investigations and class discussions. He is also involved with a group of colleagues in the national KidsMatter mental-health curriculum evaluation and a joint university – school research project on building the capabilities of school communities to enhance their wellbeing

Rosalind Murray-Harvey holds the position of Associate Dean (International) in the School of Education at Flinders University in Adelaide, South Australia. Her research and teaching are located within the fields of educational and developmental psychology. Areas of research in the field of educational psychology stem from an interest in better understanding the influences that contribute to the academic achievement of students across the years of schooling and in higher education. Of particular interest is research related to the effectiveness of problem-based learning in teacher education. Collaborative research in the field of developmental psychology addresses issues such as students' social/emotional adjustment to school, bullying and family stress. She has co-produced two educational videos with instructional resources related to problem-based learning, both funded through university innovative learning and teaching awards, as well as multi-media educational support materials on the topic of coping with bullying.

Helen Askell-Williams is a Lecturer in Educational Psychology in the School of Education, Flinders University, Adelaide, South Australia and is a member of the Centre for the Analysis of Educational Futures. A major focus in her research is teachers' and learners' knowledge about teaching and learning, out of which has emerged the Framework of Quality of Knowledge. Helen has also investigated learners' knowledge about what helps them to learn, the value of class discussions for learning, and learners' metacognitive knowledge. This research has involved a range of groups, from students in elementary school to medical students in their clinical experience year. Helen is also interested in wellbeing, and is currently working on two major projects. The first is a large scale survey and interview evaluation of the KidsMatter health promotion initiative in 101 schools across Australia. The second is a joint university – school research project on building the capabilities of school communities to enhance their wellbeing.

Notes

- 1. Remember, Understand, Apply, Analyze, Evaluate and Create
- 2. Factual, Conceptual, Procedural and Metacognitive

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TEACHERS' VALUES IN THE CLASSROOM

Clodie Tal and Yoel Yinon

Introduction

Schools play a very central role in the children's development almost all over the world. They are an important part of their lives although they have never been asked whether they were willing to go to school. As Sidorkin (2002, p. 45) puts it: "Being a child became equivalent to being a student, and experience of childhood and adolescence became confluent with experience of schooling." Schools are thus active participants in childrearing all over the world. Their main "business" being to educate children and adolescents. The question is what is "good education"? Good education might be interpreted by some as an effort to turn the children into perfect copies of ourselves ("the old generation") and as obedient followers of existing traditions and practices. Other people would perceive the attempt to assist the children find their own, most suitable way in the world as "good education." Some would aspire to have the children know how to use the power of their status to maintain their dominance on other, less fortunate people. As opposed to that, others would argue that good education means to help the children become caring adult persons, who take an interest in turning tomorrow's world into a more fair place for more and more people. Determining what is good education, is thus a question of values. This chapter, therefore, takes an interest in the meaning of values in schools and in the process of their transmission (as viewed by some) or construction (as viewed by others). The chapter will also discuss the implications of our understanding of values for school and classroom practices.

The widespread interest in the values' education at the beginning of the third millennium also comes from an additional direction. Many people are alarmed by the allegedly raising rates of violence and the adult authority crisis in schools and in families. For some, moral or character education, unequivocally means that we should urgently reinstitute the adults' authority in schools. The mere use of the expression "value education" makes other persons quiver as it is interpreted as indoctrination, coercion and an unjust limitation of the children's choices. Nevertheless, in reality there is no value-neutral education. Every decision made by schools as organizations and by individual teachers in their classrooms, reflects value preferences and it is likely to have an impact on the students' lives.

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Schools are often blamed for their ineffectiveness. However, ineffectiveness is not the worst thing schools could be "blamed" for. We must deal with the issue of value education, however, because we have to admit that schools as organizations could inflict harm to large groups of students (Sidorkin, 2002). Competitive schools expelling the underachievers, make them feel worthless and unwanted. Feeling alienated and rejected by the community is not only associated with unhappiness to the rejected, but also with delinquency and crime which turns against the rejecting community in general and some schools in particular (see, e.g., Aronson, 2000). Indeed it was found, that schools emphasizing competition, social comparison and ability, are likely to alienate a significant number of students who cannot perform at the highest levels, leading to anxiety, anger, disenchantment and eventually to dropping out of schools (Eccles & Midgley, 1989; Finn, 1989; Figueira-McDonough, 1986).

Quite often values are perceived as equivalent to morality. However, it should be recognized that morality reflects only a portion of the human values. Morality focuses on concepts of welfare, justice and rights (Turiel, 2002). Denying rights from one kid who misbehaves in the classroom because he is defying the teacher, while overlooking the same misbehavior of another child who is cooperative with her, is an example of a practice related to moral judgment. Interventions expressing morality deal with harm and fairness. Other values deal with social conventions and as such, they deal with uniformities in social organizations, their main goal being to achieve social order (e.g., driving on the right or on the left side of the road is an example of a completely arbitrary albeit necessary convention; setting an agreed upon date and time for handing in an assignment deals both with social order, but unlike the driving side issue, this rule has also something to do with fairness: because flexibility in applying it might be judged as unfair by some). An additional category of values (reflecting Turiel's, 2002, classification) deals with persons' personal choices (such as how to spend leisure time, the choice of art-work or of books to be read for monthly book reports, and so on). It should be recognized, however, that dealing with real life situations, involves quite often endorsement of values representing mixed domains (the moral, the conventional and the personal choice) as reflected in the example focused on setting and enforcing dead-lines for handing in assignments. The distinction made by Turiel (2002) among domains of values (the moral, the conventional and the personal) is important as it bears relevance to the issue of cultural relativism and the acceptance of diversity of value preferences held by individuals belonging to various collectives. Turiel asserts that moral as opposed to conventional and personal values tend to be universal. That is, people across the world, irrespective of their cultures are generally guided by ideals of preventing harm to themselves or others, and of being involved in fair exchanges with other people. This means that no one, nowhere in the world "is wired" biologically or socially in a way that is accepting of physical or psychological pain, humiliation, and is content of being involved in unfair social arrangements. Nevertheless, ideals which guide our aspirations (e.g., for fairness and, and justice for all) are not always evident in daily group practices and individual deeds. Indeed, almost any society on earth copes with unfair distribution of power, rights or resources (often based on race, gender, personal weakness of individuals). Another issue important to values that we will deal with, is the relationships between stated aspirations and preferences

and the actions undertaken on their behalf. Such relationships are, as we shall see, characterized at times by harmony and at other times by conflict. This chapter will deal with values and value education in general and will not be reduced to implications of moral education.

We must also caution the reader that the chapter is unavoidably colored by the values of the persons who wrote it. The choice of the sources, the construction of the chapter, the interpretation of the literature and of life events, as well as the selection of examples presented and the implications drawn from all these sources, are strongly influenced by the authors' value preferences.

Definitions of Values

We had previously taken the liberty to discuss values without defining them due to our understanding that the reader, as any person, holds some intuitive definition of values. We preferred to overview the issue in order to grasp the possible meanings of values in education, just before presenting their more formal definitions and several classifications of values. We now turn to the formal definitions of values, value types, and value dimensions.

"A value is an enduring belief that a specific mode of conduct or end state of existence is personally or socially preferable to an opposite or converse mode of conduct or end state of existence" (Rokeach, 1973, p. 5). Values are also defined as "broad tendencies to prefer certain states of affairs over others"-by Hofstede's (2001) simplified version of Kluckhohn's definition. Williams (1979) claims that overt and articulate values turn into criteria guiding judgments and preferences, whereas latent and unconscious values have an impact on people's daily choices. The latter definition indicates that values cannot be fully understood and meaningfully measured, without reference to attitudes and behaviors (words and deeds) that are the essence of making choices and therefore express them.

Values are thus invisible, inner constructs that supposedly guide our choices. "If we hold a value, this means that the issue involved has some relevance for us (intensity) and that we identify some outcomes as good and others as bad" (Hofstede, 2001, p. 6). For example, self grooming or religious observance are perceived by some as both relevant and desired, by others as both relevant and undesired and for a third group as irrelevant and as such, as a waste of time to deal with them. These characterizations of values imply that although everyone cherishes some things (sometimes), there are significant differences among people (individuals, social groups, occupational groups, nations) in the nature of the objects being cherished by them, either as a function of biological biases or as learned preferences or as a combination of both. What is implied, thus, is that there are no absolute "good" or "bad" values.

However, the case made by Turiel (2002) in distinguishing among the moral, conventional and personal domains, leads to the conclusion that at least as far as moral values are concerned, one can establish that it is always "wrong," in any place on Earth to inflict physical or psychological harm on another human being. Nevertheless, people endorse these moral values with different intensities and there might be some people in positions of power, asserting that there are people for whom fairness and justice are either less desirable or irrelevant, but this does not appear to ever be the case from the perspective of those being hurt, or those whose rights had been denied (Turiel, 2002; Turiel & Wainryb, 2000).

In addition, Hofstede (2001, p. 6) points to the important distinction to be made, relating the two meanings values hold: they focus on some instances on the desired (they reflect what people actually desire) and as such they deal with criteria of actual choices, and on other instances on the desirable (what people think they ought to desire) which implies acceptance of the collective's choices.

The distinction between the desired and the desirable meaning of values, has an important impact on the existence of conflicts and discrepancies within the value system: both between what one desires and the desirable by his collective, and between the desired or the desirable and the respective behaviors that express them. We will return to the issue of inconsistencies within the value system later on in this chapter. We should, however take into consideration the implication of what had been said, that values as the desired are closer to actions than are values as the desirable (Hofstede, 2001, p. 6).

Value Types and Value Dimensions

Universal Value Types and Dimensions-Schwartz

Unlike Rokeach's focus on hierarchies of single values (such as freedom, social power, self-respect and so on) more recent theories (e.g., Schwartz, 1992; Schwartz & Bilsky, 1987, 1990; Schwartz & Sagiv, 1995; Schwartz, 1996; Hofstede, 2001) and research (Schwartz,1996; Sagiv & Schwartz, 1995; Feather, 1975, 1991,1995; Pezza, 1991; Homer & Kahle, 1988; Hofstede, 2001) propose that values are organized in clusters sharing a common underlying motivation. Schwartz's is by far the most elaborate and empirically validated theory of value structure and content. "The crucial content aspect that distinguishes among values is the type of motivational goal they express" (Sagiv & Schwartz, 1995, p. 438).

Schwartz defined and empirically validated 10 motivationally distinct types of values expressing comprehensive, universal requirements of human existence to which all individuals and societies must be responsive: needs of individuals as biological organisms, requisites of coordinated social interaction, and survival and welfare needs of groups (Schwartz, 1992; Schwartz & Sagiv, 1995). Therefore, each type is defined in terms of the motivational goals expressed, as well as in terms of the single values they consist of. For example, the motivational goal of achievement was assumed to express the pursuit for personal success through demonstrating competence according to social standards, and it includes the following single values: successful, capable, ambitious and influential (Schwartz & Sagiv, 1995).

Included in Schwartz's theory of value structure are dynamic relations among the motivational types of values. Allegedly, actions taken in the pursuit of each type of value have psychological, practical, and social consequences which may conflict or

may be compatible with the pursuit of other value types. Nevertheless, the dynamic relations among value types are based on the direct measurement of single value priorities included in each type and not on the measurement of actions which allegedly express them. The total pattern of relations of value conflict and compatibility among value priorities, yields a structure of value system that has also been repeatedly confirmed in cross-cultural research (Schwartz, 1992; Schwartz & Sagiv, 1995).

Finally, Schwartz (1992) found empirically that the ten value types included in the global value structure are organized along two basic bipolar dimensions: openness to change (composed of self direction and stimulation) versus conservatism (includes conformity, tradition and security) and self transcendence (includes universalism and benevolence) versus self enhancement (includes achievement, power and hedonism). The conflicting motives represented by the conservative-openness to change dimension are the extent to which people preserve the status quo and the certainty it provides to relationships with close others, institutions and traditions, versus the extent to which people are inclined to follow their own intellectual and emotional interests in unpredictable and uncertain directions (Schwartz, 1992, p. 43). The self transcendence-self enhancement dimension is supposedly based upon a conflict between people's tendency to transcend selfish concerns and promote the welfare of others, close and distant, and of nature, versus their tendency to enhance their personal interests (even at the expense of others) (Schwartz, 1992, pp. 43–44).

Value Types and Dimensions Characteristic of Organizations

Hofstede (2001, p. 29) defined and systematically studied five "independent dimensions of national cultures differences," each supposedly stemming from "basic problems with which all societies have to cope, but on which their answers vary." The five dimensions defined by Hofstade are as follows: Power distance which is related to the different solutions to the basic problem of human inequality; Uncertainty avoidance which is related to the level of stress in a society in the face of an unknown future; Individualism versus collectivism, which is related to the integration of individuals into primary groups; Masculinity versus femininity, which is related to the division of emotional roles between men and women; Long-term versus short-term orientation, which is related to the choice of focus for people's effort: the future or the present. Hofstede also found that organizations within each culture are likely to differ mainly along the "power distance" and "uncertainty avoidance" dimensions.

Value Types and Dimensions Differentiating Among Schools as Organizations

Whereas Schwartz and Hofstede presented value dimensions which presumably differentiate between and might be characteristic of "national cultures," or organizations in general, Friedman (2006, in press; Friedman & Bareket, 2006) suggested and currently found based on a study of Israeli teachers, value dimensions and organizational strategies differentiating among schools. His model is based on teachers' report on situations, activities and guidelines occurring in their school, expressing the following

7 value types: conformity, autonomy, innovation, conservatism, boundedness, achievement and well being (Friedman & Bareket, 2006). He found empirically that the aforementioned value types and an additional eighth type that emerged in his study (freedom of the mind -creativity) are organized along 4 dimensions: three of which form continua from low to high (Self-Direction comprising of a continuum from conformity to autonomy; Uncertainty Avoidance comprising of a continuum from conservatism to innovation; Control comprising of a continuum from boundedness to freedom of mind-creativity), and one of which has two opposing poles (task-centeredness versus human-centeredness) (Friedman, in press).

A second dimension emerging from Friedman's study, comprises of a hierarchy of three levels of school strategic organization. Organizational strategy is defined by Friedman (in press) as a pattern or a plan that integrates the school's major goals, policies and actions into a cohesive whole, stemming from a system of ideas based on values. The three levels of school strategic organization include: Soundness expressing the school's perceived desire to establish sturdiness in its pedagogical and organizational performance; Prestige reflects the school's perceived desire to acquire recognition for the students' high achievements and the teachers' and the students initiative and innovation; Compliance reflects the school's perceived desire to please the students' parents, the community, the public at large and to adapt itself to their norms. The hierarchic nature of the strategic organization implies that the school's compliance with external ideals, demands and norms ought to follow and be based on a sound and agreed upon (by the members of the school community) pedagogical and organizational plan, which reached prestige gained by its own accomplishments.

Diversity among schools is thus, according to Friedman's model, likely to reflect variability regarding the intensity of endorsement of the value dimensions on the one hand (e.g. more conservative, compliant, task-centered as opposed to autonomous, innovative and human-centered schools), and on the other hand, the level of strategic organization (schools which might focus at a certain point in time on establishing soundness as compared to schools focused at the same point in time on pleasing the public they serve.) Nevertheless, effective school functioning requires as already mentioned, soundness and prestige to come before compliance with external demands.

Comparison Among the Theories and Conclusions

In sum, while it is currently widely accepted that behaviors are not usually determined by single values (e.g., Schwartz, 1992; Turiel, 2002; Hofstede, 2001; Friedman, in press), the clusters, types and dimensions suggested by the different theories are not identical-in spite of resemblance they bare. All theories seem to focus, however, on seemingly universal human concerns dealing with: (a) the need to cope with uncertainty (which has an impact on the basic approach to changes and novelty), (b) the welfare of individuals, and (c) the need to arrange the exchanges between individuals and the groups they belong to, in order to ensure social order.

Moral values comprise part of the value system, being placed in the self-enhancementself-transcendence domain (Schwartz's theory) or human-task-centered domain (in Friedman's model). However, when speaking about national, organizational, pedagogical values, these authors really mean national, pedagogical, organizational practices and strategies reflecting some central basic values which are universal, abstract criteria guiding their behaviors. Therefore, we need to bare in mind that there are no "real" national or organizational or feminine or masculine values, but rather universal values that may be shared by groups and translated by them into certain practices, social conventions or personal preferences.

Values Held by Schools Versus Those Held by Teachers and Pupils

Focusing on values shared by collectives such as schools is important as it points to common goals guiding their practices, rituals, symbols, organizational strategies and so on. Nevertheless, we ought to always remember, as indicated by Turiel, that large groups such as nations or "cultures," and in our case schools, consist of small subgroups and any group consists of individuals. Value preferences "held" by individuals and small sub-groups are likely to differ - sometimes, on some issuesfrom the "mainstream" practices and social conventions, reflecting the common ideals. Moreover, the distribution of power and control characterizing a group is likely to bring about an under-representation of the values and interests held by those in positions of lesser power, possibly leading to their discontent that maybe channeled in either direct or indirect protest. Therefore, if we are concerned with the well-being of individuals who are the building blocks of any group (individual students or teachers and other staff in schools) we ought to get acquainted, not only with the common "organizational" or cultural values, but also with preferences and judgments held by individuals and subgroups- particularly by the untypical and unprivileged members of any group.

Harmony and Conflict in the Value System

One of the questions raised by the perception of the value system as comprising of types and dimensions is the extent of compatibility between its components. In this section we will deal with various theoretical perspectives related to harmony and conflict within the value system and their meaning in the daily functioning of individuals and groups in general and in schools and classrooms, in particular.

Seeing the value system as harmonious, assumes that individuals or groups would not usually hold opposite values, in terms of the motivational content they are based on. For example, nations would be either individualistic or collectivistic. An additional meaning of harmony would be, that all or almost all members of a group would adhere to similar values. At the level of individuals, we might expect that individuals would not rate as "high" both self enhancement and self transcendent values, or would not state that they cherish both conservatism and openness to change. An additional facet of harmony is related to the expected relationships between stated values and the actions performed by individuals in different situations, as well as practices and social conventions or rituals, representatives of groups, organizations or nations. Harmony in this sense means that it would be expected, that individuals who state that they prefer openness to change values will tend most of the time to choose adventurous options, to readily change their physical environments, to easily adapt to new technology and food, to easily accommodate to new places and people, to be innovative in their jobs and so on.

At the level of schools we would expect high compatibility among the various teachers' value ratings related to innovation, task versus human centeredness and so on, as well as high compatibility among stated goals and actions adopted by the teachers in various situations.

Conflict in the Value System as an Expression of Changing Social Norm: A Case Study

In order to understand the meaning of conflicts or incongruence operating within the value system, let us present an example of a documented internal struggle experienced by Michal, a pre-service teaching student. Following, we present Michal's report¹ focused on the implementation of an intervention plan which was an assignment in a "Social Competence" course Michal was enrolled in. Michal was at the time a second year pre-service teaching student doing field work at Maor's school. Maor was a 6 years old who: "has conduct and emotional problems raising social difficulties in his encounters with other children." Michal also mentions as a part of the background that:

The trend in the class in which I do my field work is to be close to the teacher and to be good. From the beginning of the school year his classmates noticed Maor's behavior and perceived him as a trouble- maker and therefore disliked by the teacher, which automatically "reduced his worth" in the children's eyes...From the beginning of the school year Maor's teacher claims that he has attention problems but that his parents refuse to cooperate. (Part of Michal's intervention plan-April, 2005)

Michal reports that she was advised by both the fieldwork mentor and by her college tutor for her own good, not to include Maor in a small group work, because he would ruin her work and she would not be able to teach anything. Exclusion from the group upon interference, was considered a common practice both in Maor's class and as a norm in many Israeli classes. The "Social Competence" course Michal was enrolled in, attempted to change the existing perception and to reformulate the goals of interventions as enhancing the children's social skills and acceptance, instead of as perceiving difficulties of children such as Maor's, as mere interference to the class or group work. Michal was thus "caught" in a conflict between the collective values (which tended in this case to favor the welfare of teachers and the whole class at the expense of the emotional well-being of the individual) and her own tendencies reinforced by the course she was enrolled in, to assure each pupil's well-being. At the beginning, she tended to do what everyone else did: to exclude Maor from the group. This action, however, made her feel unhappy and was the cause of an intensive inner struggle (between the tendency to adopt a way of action which would be beneficial to her, and leave her in harmony with her fieldwork mentor, and an inner moral call that whispered to her that such an act would do injustice to a young kid). She finally decided to follow her conscience's inner voice and was rewarded by a significant improvement in the child's behavior. This is how she describes what she went through:

My approach towards Maor has changed as a result of the (implementation) of the intervention plan. In the process of working with him I started to think that he is not such a bad boy as most people think of him.

The most positive thing that happened as a result of the implementation of the intervention plan was the change in my approach towards the boy: towards the end of the first semester I tended to agree with my field work tutor (Maor's teacher is Michal's fieldwork tutor) that Maor is hopeless, and I almost gave up on him. Today things have changed. I can see a few changes: the first one is related to my approach towards the boy and the second one consists of an improvement in the child's behavior. But as I had already mentioned, much is yet to be done...I think that the change I went through, is larger than the change Maor has experienced. Nevertheless, I think that Maor's behavior improved and this is a small accomplishment. As far as I am concerned, his success is really my success. (entry from Michal's diary, May 25th, 2005)

I realized, in the process of writing (this paper) that we tend to maintain the first impression we form on people and this first impression acts as an obstacle in the way of building a relationship with them. During the implementation of the intervention plan I often found myself stopping and thinking what I ought to do now-as naturally the will to exclude him, to send him away from the group (rose) as he frequently interfered with the procession of the lesson. (ibid)

Various Theoretical Approaches to Conflicts and Inconsistencies Within the Value System

We can learn from Michal's report that conflicts are necessary for changing unfair educational practices. Turiel (2002) indeed points to the positive role, conflicts play in the endless struggle to bring about societal changes favoring individuals or small unprivileged groups. Thus, conflicts are not necessarily perceived as "unhealthy" characteristics of the value system, but rather as an integral part of a real changing life. Societal change is always a consequence of some conflict.

This perspective on the nature of value conflicts differs from the one advanced by the consistency theories (e.g., Schwartz's, 1992, 1996) and Rokeach's (1973) presented in this chapter, and Durkeim's (1973) sociological approach which see the value system as mainly characterized by harmony, both within individuals and between individuals and the groups they belong to. Moreover, from the traditional consistency perspective, incongruence and conflicts are perceived as deviations from the normal, and must be "fixed." Nevertheless, Turiel (2002) and Hofstede (2001) do not perceive the value system as solely characterized by constant conflict, either within the individual (as suggested by Freud and Piaget) or between individuals and the groups they are associated with, as proposed by Seligman and Katz (1996) and Kristiansen and Zanna (1994). Seligman and Katz propose that people hold various value- attitude-behavior systems for different domains and contexts, whereas Kristiansen and Zanna (1994) emphasize the rhetoric justification use of values adopted by people, rather than their broad organizing effect on attitudes and actions. Thus, it could be concluded that the value system is normally characterized by both harmony and incongruence and conflict within and between individuals, between individuals and groups and between different groups.

Implications for Education

This above position has an impact on educational practices. For one, characterization of ours, other individuals', as well as group "value profiles," necessitates getting acquainted with and articulating both value preferences as well as areas of conflict, incongruence and possible discontent. For example, Tal and Yinon found that characteristic value profiles of Jewish Israeli teachers, include both areas of harmony and conflict between values, attitudes and behaviors, reflecting conservativeness versus openness to change and self transcendence versus self enhancement as a function of the level of their religiosity (Tal & Yinon, 1998) and voting behavior (Tal & Yinon, 2002a). In addition, construing the value system as containing both harmony and conflict, will effect our expectations and dialogue with teachers and students. It seems useful to learn to value internal struggle (just like Michal's presented in this chapter) and encourage teachers and students to get involved in them and in contemplation on educational practices, social exchanges and rules and to voice out their discontent. Finally, we must be particularly tuned to hear the voices of teachers and students representing underprivileged groups, of those who for some reason, are less outspoken and consequently are found in positions of lesser power. The value preferences and discontents of the underprivileged are most likely to go unnoticed, and to directly influence their welfare and as such their discontent is likely to finally have an impact on the school life in an indirect manner.

Educationally Detrimental Inconsistencies

The existence of different types of conflicts or inconsistencies within and between people is thus a fact of life. Both Turiel and Sidorkin emphasize the positive aspects of conflicts as an authentic expression of moral judgment and behavior and as a necessary condition of social change. Examples of constructive inconsistencies were presented in the previous section. However, in everyday life in general, and in schools in particular, we all witness also conflicts and inconsistencies that are confusing or hypocritical. These inconsistencies inflict harm on students and teachers alike, as they teach the young, that the "people in power" cannot be trusted. Therefore we have to find criteria separating the "good" conflicts and incongruence from the "bad" inconsistencies. A basic criterion differentiating between "good" and "bad" conflicts is focused on their authenticity. Teachers should be able to detect inconsistencies that are educationally detrimental to the children and deal with them.

Some "bad" inconsistencies are a result of mere hypocrisy of people in power or of others who try to please people, without necessarily meaning to act upon the stated values. As such, they teach the young to act hypocritically and not to trust others. For example, just stating that the value of free choice is very important to us, while not being able to accept the students' opinions and judgments contradicting the teachers' or the school administrators' positions, is quite unbearable and is misleading and confusing. Orwell's (1945) memorable statement: "All animals are equal, but there are some animals that are more equal than other animals" is a vivid representation of the hypocrisy sometimes involved in the statement of values that no one is going to act upon.

Other times, inconsistencies stem from thoughtlessness and from a tendency toward automatic implementation of practices, without consideration of the values that these practices represent, and of the prices paid (by students and teachers) as a result of their implementation. Following is an example of such an inconsistency.

An educational policy in all Israeli public schools and kindergartens is to post the state symbols in a visible spot in each classroom. These commonly include the flag of the state, the national anthem (which is quite controversial in Israel) and the pictures of the state president (an honorary function in Israel) and the Prime Minister. This mandatory policy is a matter of national values which the "state" is willing to promote and goes most of the time undisputed. During field visits in several schools and kindergartens in Israel during the Spring of 2006, the first author noticed that after the last elections the picture of the new Prime Minister was not posted in most of the observed classes. In some classes the picture of the former Prime Minister was posted (the former Prime Minister suffered a severe stroke a short time before the elections which had left him unconscious), whereas in other classes only the picture of the president was posted. Some of the field visits were just before or after the Israeli Independence day – an occasion in which democracy and civilian and state issues are being taught more intensively to the children. The first author visiting the schools asked the teachers and on an occasion, a school principal about the reason why the new Prime Minister's picture was not posted. Some teachers told us that they felt uncomfortable to take off the former Prime Minister's picture as he was ill and it might have been inconsiderate to take his picture off the wall in such hard times for him. Other teachers told us that they just did not have the new Prime Minister's picture available and as soon as they would get one, they would post it. A principal of an elementary school told us: "Why bother? We'll soon have new elections and the new Prime Minister will probably not be reelected."

It is also interesting to notice, that these issues went unnoticed by the school staff and undiscussed among them. Furthermore, no one discussed this issue with the students who were nevertheless exposed to the "nation wall" on a daily basis and might have learned that whatever and whoever was posted there, was irrelevant and that teachers did not really mean what they said. Education is being portrayed by educational practices which reflect thoughtless inconsistencies, as "something" which has no real life relevance.

The processes Contributing to the Formation of Value Preferences

How do we form our value preferences? What will influence the extent of sturdiness, harmony and areas of conflict characteristic of our value system? Answering these questions might turn beneficial to teachers for two reasons: a. they might enhance the teachers' self awareness to the characteristics of their own value profiles-preferences and conflicts included, as well as to their impact on their students; b. they might serve as guidelines in the process of helping the children crystallize their developing value preferences.

Biological tendencies are likely to predispose individuals to form certain preferences. For example, it is possible that the persons' temperamental tendency to approach new experiences would eventually lead them to prefer in the long run values reflecting stimulation and innovation, and would bias them toward adoption of attitudes and actions fulfilling this need. Similarly, it seems plausible that the temperamental tendency to withdraw from new experiences would eventually contribute to the preference of conservative values (such as family and national security, social order respect, respect for tradition, self-discipline and so on) as well as the adherence to attitudes (such as favoring censorship of cultural productions, negative stereotypes toward strangers, opposition to new technology and so on) and behaviors (such as exerting more control on children's attitudes and behaviors, abstinence from changes in daily routines and home decoration, lack of contact with strangers and new immigrants, observance of customs and traditions and so on) expressing stability and security needs. Nevertheless, factors in the children's environment are likely to interact with the biological tendencies and influence the crystallization of their value profiles. As stated by Bronfenbrenner (1979), the development in general, and the formation of value preferences in particular, do not occur in a vacuum, but rather develop in the context of relationships between the organism and various environmental systems (such as family, school, peers), as well as the interrelationships between such systems (parents and teachers for example).

Early in their lives, children's values are influenced by their families. At the beginning, "we learn to value things because they are important to people who are important to us. Our relationships with these people make us accept rules as a necessity" (Sidorkin, 2002, p. 137). Values are also being transmitted by schools. Later in life universities and work places continue to influence our values. The media is likely to indirectly influence our values as well (Hofstede, 2001; Hofstede & Hofstede, 2005). The venues of transmission differ according to the values of society and of parents. Traditional modes of transmission in families and schools tend to aim at having children fully assimilate the transmitted values, using rewards and punishment upon violation of social conventions, or sometimes through identification using personal example and charisma (Grolnick, Deci, & Ryan, 1997). In traditional modes of

transmission, the children are perceived as passive recipients of the societies' values which presumably provide them with given, "ready made" contents. Classic theories such as Freud's, Skinner's and Durkheim's, in spite of the several differences between them, share the viewpoint that "moral development primarily involves accommodation to and internalization of the norms, standards and practices of society" (Turiel, 2002, p. 2). As opposed to this view, organismic (such as Piaget's or Kohelberg's theories) and constructivistic theories, define internalization as "the processes by which individuals acquire beliefs, attitudes and behavioral regulation from external sources and progressively transform those external regulations into personal regulations, values, or regulatory styles" (Grolnick et al., 1997, p. 139). As Grolnick et al. (1997) emphasize, the full or optimal internalization involves not only taking in a value or regulation, but also integrating it with one's sense of self. That is, making it one's own, so that the resulting behavior will be fully chosen or self-regulated. (p. 139). Turiel (2002, p. 2) proposes that "individuals construct judgments through their social interactions and that they form several different kinds of judgments about a multifaceted social world." The theory of Self Determination (Grolnick et al, 1997) asserts that there is a continuum of internalization, describing the extent to which a value has been internalized, rather than a clear cut dichotomy between not internalized versus fully integrated values within the self system. Grolnick et al. (1997) mention that rewards, deadlines, threats, evaluations as well as pressuring language and demanding interpersonal styles, tend to be experienced as controlling and consequently undermining intrinsic motivation as the perceived locus of causality, for the behavior shifts from internal to external. Opportunities of choice, have been found to enhance intrinsic motivation. Frequent discussions with the children about the pros and cons of each alternative, about personal and societal profits and losses associated with their choice, are likely to gradually contribute to the internalization of values and the children's autonomy. Knafo and Schwartz (2003) and Rohan and Zanna (1996) also point out that parental responsiveness and supporting relationships with parents, as opposed to demanding, authoritarian relationships, are more likely to lead to more successful value acceptance and transmission to children and adolescents. Interestingly, Rohan and Zanna (1996) found that, in addition to children of left-wing liberal parents, children perceiving their right-wing authoritarian parents as responsive (as opposed to children of authoritarian parents that were perceived as cold and unresponsive) adopted themselves, authoritarian right-wing values as adults. This finding shows how right-wing values associated with racial prejudice are being transmitted in families. This finding poses the question how could we "encourage the transmission of those values and attitudes that will promote mutual rewarding relationships among people?" (Rohan & Zanna, 1996, p. 272). We suggest that schools could be an important agent of transmission of egalitarian and fairness values that are likely to counterpart the impact responsive authoritarian parents have on their children.

The manner in which we view the transmission of values, has an impact on our educational practices. For example, educators' perceptions of venues of value transmission have an impact on the ways schools as organizations and individual teachers in their classrooms, set and reinforce rules of conduct. That rules of conduct are important to any collective of people is not a disputable issue. However, how rules are being set and reinforced, depends on the explicit or the implicit values held by the educators. Teachers coming from a constructivist perspective would tend to encourage their student's involvement in the formulation of the rules and in sanctions following transgressions. In contrast, traditional teachers would tend to set the rules themselves and to heavily rely on punishment, pending violation of the rules [see Kohn's (1996) book for a detailed comparison of discipline practices as a function of traditional as opposed to constructivistic views]. Nevertheless, we ought to remember that the nature of rules and of their enforcement, depends also on the particular children we are dealing with and their specific needs, and not only on the teachers' value preferences.

Values in the Classroom: Summary of Implications for Educational Practices

We tried to show in this chapter that the discussion of values is not reserved to philosophers and to formal teacher training requirements, but rather it is closely related to the daily practices in the classroom and to the teachers' and the students' well-being.

We learned from Friedman's (2006, in press) model and research that schools need to first establish agreed upon goals and establish their prestige before attempting to comply with external demands. Indeed, Friedman found detrimental to the fruitful operation of schools in Israel, their tendency to be overly responsive to external demands, to try to please many capricious masters before determining their autonomous positions. The price of the tendency to comply with governmental demands without discrimination, is likely to be reflected also in Tal and Yinon's (2002b) findings which show that Israeli teachers' professional behavior tends to be detached from their personal value preferences. This is a lesson that should be learned both by those who demand the teachers' instant compliance with external policies, regardless of their existing values, and by the teachers as individuals, who must be critical towards demands, to out voice their opinions and reservations and to implement practices only after thorough scrutiny, regarding the counterbalance between the students' welfare and the profit to the collective. We demonstrated in this chapter how a pre-service teaching student coped with the recommendation to exclude a child from her group in a way that was hard for her, but was beneficial to the child's welfare.

One of the decisions that need to be made by the school staff is related to the areas and extent of normalization of children's behaviors, and to the issues, extent and methods of encouraging diversity among children and the exercise of free choice.

Turiel's (Turiel, 2002; Turiel & Wainryb, 2000) distinction between moral, conventional and personal value domains is helpful in guiding teachers in discerning what are the desirable domains in which diversity should be encouraged as opposed to issues that ought to be normalized, regardless of the cultural or individual characteristics of the people involved. Based on his distinction, the striving for fairness, welfare and justice among students and teachers ought to be regarded as universal. This means, that as teachers, we ought to constantly assess our judgments and practices for their fairness and their impact on the welfare of all the students. Enhancing mutual, fair relationships with and among the students, should be seen from this perspective as one of the teachers' principal goals. These goals need to be translated in daily educational practices, such as frequent learning which is monitored by teachers for mutuality and fairness of the social exchanges in heterogeneous groups (based on common interests rather than on similar levels of achievement). As indicated by Sidorkin (2002) and Aronson (2000) teachers ought to learn themselves and encourage their students to understand situations from different people's perspectives, particularly from the opponents' points of view.

It seems also important to understand and to accept opposition as a legitimate vehicle of expressing discontent, and of embettering one's personal or one's group position (Turiel, 2002). Turiel taught us that not everything that is maladaptive is also pathological, and that not always the children's misbehavior in schools is to be blamed on the families' failure to transmit their children the "right values." Quite often teachers tend to solely blame the parents for their children's conduct and they do not assume responsibility for the misbehavior related to the feelings of alienation and worthlessness some children might experience due to educational practices.

In addition, teachers in every school need to establish rules ensuring the social order within classrooms and schools. However, the number, the content of the rules, the extent to which children are seen as partners in the process of their formulation, the ways of their enforcement, are widely dependent on the schools as well as the individual teachers' value preferences and on the students' characteristics. However, one should remember that rules are not divine. They are conventions made by human beings for the sake of human beings. Teachers must assure that rules are fair and non discriminative and that they can be modified whenever needed.

In the personal realm, we need to learn and teach the children to be tolerant of other people's value preferences that do not harm others. Cherishing religious practices or being indifferent to them, is not a moral issue and as such is neither "good" not "bad" from a moral stance. Preferring a given musical style or having heterosexual or a homosexual preference are things that belong to the individuals' personal choices, and have nothing to do with morality. Nevertheless, just as the rules are not divine, people in general, and teachers in particular are not saints. Besides our personal individual preferences, we are also limited in our ability to be tolerant of everything that is different from ourselves. Therefore, self awareness of the issues we tend to be intolerant about, is important in our exchanges with colleagues and students. It might be a good idea, for example, for a teacher who has a hard time overcoming his homophobic attitudes, to not have close and intimate talks with homosexual students and to find another teacher who is likely to be a better partner for such a talk.

Listening to voices different from ours is important. Listening closely to the voices coming from those in a position of a lesser power (other teachers and students) is a necessity. We should remember that opposition and discontent which are not expressed openly, are likely to find an indirect, subversive way of expression. Aggressive children often represent "the evil" for us. Not to talk to them seems natural. However, a dialogue is the only way out. This is what Sidorkin has to say about coping with aggressive children:

An educator who wants to reduce the amount of evil in the world, must learn to engage into dialogical relations with what he or she perceives to be evil in students. At the same time an important educational aim is to introduce students to the world of dialogical relations with other people, not excluding those who the students perceive to be evil. (Sidorkin, 2002, p. 194)

To engage in such a dialogue, does not mean to agree with aggressive transgressions against other students. Just the opposite would be the case. We suggest that teachers use their relative position of power, in order to ensure fair interactions and distribution of rights with and among the students, and to prevent physical and psychological harm inflicted to any child.

Those who are eager to recommend that schools reinstate the adults' authority by the use of authority symbols and punishment, should be reminded that research shows that supportive and responsive relationships with children, are more likely to make them adopt our values than authoritarian relations. Therefore, if we really want our kids to be moral and considerate, we would better start by improving our own conduct which is an important source of learning about moral judgment and behavior.

Besides inborn biological tendencies, the qualities of the teachers' direct relationships with their students as well as how they monitor the relationships among the peer group, were portrayed in this chapter as bearing much influence on the children's formation of values. Relationships with and among the children, besides being the infrastructure of their socioemotional lives, are also carriers of learning. Children learn through these relationships both contents (what are the things being valued by the teachers and the culture, by other cultural groups) and how to deal with multi-choice situations. Alternatively, they might learn how to avoid making choices. Therefore, teachers should be particularly reflective about their relationships with different children and what they convey. However, children are likely to inadvertently learn about values also by a mere passive exposure to the teachers', the schools', the governments', commercial organizations' expression of value preferences through texts being read, pictures and other art representations being posted, media programs being listened to. Consequently, teachers should first of all be aware of these indirect venues of value transmission. Secondly, teachers are advised to pay close attention to their own and their schools materials and to the values expressed by them and to monitor as much as they can venues of value transmission that children are exposed to. Thirdly, it is most important to realize that neither teachers nor parents are omnipotent. It is wise therefore, to raise the children's awareness of the values "hidden" in texts, programs, the media, the internet and to teach them to be critical and vigilant about "consumed" messages.

Biographical Notes

Clodie Tal is a developmental psychologist. She received her PhD from Bar-Ilan University, Israel in 1997 and she is as of 2007 the head of the Early Education Department at the Levinky College of Teachers' Education. Since 1981 she has been involved in preservice and in-service teacher training (teaching, mentoring, counseling) both at Levinky and in various communities throughout Israel. Her main areas of teaching include: early childhood development, guiding and teaching relationships, social competence and coping with conduct problems, classroom management and in general relationships

between learning and socio-emotive processes. Her main publications in the last years include three books (in Hebrew): *Guiding and teaching which promote autonomy; Social competence: development, evaluation and implementation, Emotional intelligence: theory and practice.* Her research interests include: children's and youth' conceptions of terrorism, psychological processes related to classroom management and students' self-learning in the process of pre-service teacher training.

Yoel Yinon is an Emeritus Professor at the Department of Psychologyin Bar-Ilan University, Israel. He received his PhD from UCLA, California, 1970. From 1970 to 2005, he taught Social Psychology at the Departments of Psychology and Sociology of Bar-Ilan and Tel-Aviv Universities. He served as the head of the Psychology Department at Bar-Ilan University (1979–1981). From 1996 he is the Chief-Editor of Megamot (Trends), the Israeli Journal of the Behavioral Sciences published in Hebrew. His main interests are: Aggression, Pro-social Behavior, Inter-group Relations and Social Values.

Note

1. The following citations are translated verbatim from Michal Pely's final report which was handed in July 2005. An analysis of Michal's report is also included in Tal (in Press).

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FOOTNOTES TO TEACHER LEADERSHIP

Mark A. Smylie and David Mayrowetz

Teacher leadership has been a prominent feature of the educational reform landscape for some time now. Since the mid-1980s, teachers have been looked to with increasing regularity as agents of school and classroom change. Their leadership has been promoted in a number of different ways, from involving them in school-level and district-level decision making; to creating specific leadership roles related to teacher professional development and instructional improvement; to encouraging informal and collaborative leadership work on teams, as part of school professional community, and through initiatives to develop distributed leadership. The proliferation of opportunities for teacher leadership development in recent years reveals a great deal of faith and confidence in its efficacy for promoting teacher professionalization and school improvement.

With the proliferation of opportunities for teacher leadership has come increasing attention to the subject in the scholarly and professional literature. This literature now spans almost 30 years. A substantial amount of research has examined the development, exercise, and outcomes of different forms of teacher leadership. Other research has examined conditions that shape its function and effectiveness. This literature has been reviewed with increasing regularity. Several major reviews have been published in the past 10 years (Murphy, 2005; Smylie, Conley, & Marks, 2002; York-Barr & Duke, 2004; see also Lieberman & Miller, 2004), including one in the first edition of this handbook (Smylie, 1997). These reviews are extensive treatments of theory and empirical findings concerning teacher leadership and together they provide a clear and comprehensive picture of the history and state of the art of the research.

Even though the study of teacher leadership continues unabated, we chose not to write another review of research findings and duplicate much of what has been done so recently. Instead we appropriated the idea for this chapter from a paper published some time ago by James March titled "Footnotes to Organizational Change" (1981). March stated in the introduction to that paper that his intention was not to review the findings of a rapidly growing empirical literature on organizational change. That task was left others. Instead, his purpose was to introduce several "footnotes" to the research, to "comment" on the corpus of knowledge at the time, and to "identify a few speculations stimulated by previous work" (p. 563). March's footnotes were intended to draw attention to overlooked but potentially important

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching*, 277–289. © Springer Science+Business Media, LLC 2009 aspects of the change literature, to focus attention even more sharply on key issues, and to provoke new thinking.

With apologies to March, in this chapter we set out a few footnotes of our own on teacher leadership. Our intention is to offer some insights into the complexities of teacher leadership, make some taken-for-granted things a bit more problematic, and reemphasize some things we think we know but may not take seriously enough. Like March's footnotes, ours are grounded in the relevant literature and they push beyond it. They have a speculative quality that we hope will spur new thinking and perhaps suggest some new directions for future inquiry.

Five Footnotes

We identified our footnotes from our reading of the literature on teacher leadership and from our extensive combined experiences observing and analyzing efforts of schools and school districts to develop teacher leadership. Our assessment suggested an array of possibilities for footnotes but five stood out as particularly interesting and important:

Footnote 1: The presumption of "goodness."

Footnote 2: The myth of "the natural."

Footnote 3: The leadership paradox.

Footnote 4: The new "them."

Footnote 5: Who is a leader anyway?

Each of these footnotes is discussed below. Much more can be said about each. However, space limitations restrict us to a certain level of generality.

The Presumption of "Goodness"

There is a presumption of inherent "goodness" in teacher leadership (Lieberman & Miller, 2004; Murphy, 2005; Smylie et al., 2002). Leadership is thought to be good for the teachers who assume new leadership roles, for their teaching colleagues, for school administrators, and for students. The logic of teacher leadership promises that it can be an effective instrument for school improvement and the improvement of classroom instruction. It can also play an important positive role in the development of teaching as a profession. This optimistic, even exuberant thinking about teacher leadership makes it difficult to consider the possibility that teacher leadership might be anything but good.

But in her recent book *Bad Leadership*, Kellerman (2004) contends that in the past few decades we have fallen prey to a "dewey-eyed" view of leadership, making the general concept of leadership synonymous with *good* leadership. In doing so, she argues, we overlook that fact that leadership can also have a dark side (see also Bass, 1990; Bass & Steidlmeier, 1999; Sternberg, 2007; Yukl, 2002). She believes that overlooking the presence and prospects of *bad* leadership creates a number of serious problems. Not the least of which is "how … we ever stop what we refuse to see and study" (p. 13).

According to Kellerman, one can think about the goodness or badness of leadership on two dimensions – effectiveness and ethics. To simplify a complicated argument, bad leadership can be thought of as ineffective leadership, unethical leadership, or a combination of the two. Leadership can be extremely effective in achieving particular ends, but it can be bad in the sense that those ends or the means to achieve them are unethical. Leadership can seek noble ends but be bad in the sense that the means to achieve them are ineffective or unethical. Leadership can simply be bad because both ends and means are unethical and ineffective. Bad leadership is distinguished from good leadership, which is defined as both effective *and* ethical.

The research on teacher leadership presents a clear challenge to the presumption of goodness and clearly points to the possibility of badness. The research raises the prospect of badness not only in the way that teacher leadership is designed and promoted as an aspect of school organization but also in way that leadership is enacted by individual teachers. There is plenty of evidence of ineffective teacher leadership. Overall, the research on teacher leadership outcomes is equivocal at best (Smylie, 1997; York-Barr & Duke, 2004). Looking across studies of different forms of teacher leadership, one finds that most benefits accrue to the teachers who assume new leadership roles. These benefits relate to teacher leaders' own professional learning and development, motivation, and professional commitments. The research suggests that while teacher leadership may promote the professional development of teaching colleagues it can also often lead to distancing and conflict, even loss of trust and the creation of resentment, all of which can compromise the ability of teacher leaders to perform their responsibilities effectively (York-Barr & Duke, 2004). The research also suggests that under the most positive conditions, teacher leadership is not likely to be particularly effective at the school level where it is much more difficult for teacher leaders to negotiate or overcome impediments such as unsupportive administrative leadership or organizational culture (it is likely to be more effective at the classroom level). Finally, there is little evidence that teacher leadership is effective in promoting student outcomes.

There are a few studies that provide glimpses of bad teacher leadership as unethical or potentially unethical leadership. For example, Conway and Calzi's (1996) cases of the "dark side" of participative decision making tell tales of self-interested political resistance and sabotage, territoriality and insularity, the incitement of conflict and abdication of responsibility, and the domination of personal over professional concerns. Muncey and McQuillan (1996) documented self-interested conflict and divisiveness among teachers working to implement small school reform. And Smylie and Brownlee-Conyers (1992) and Firestone and Martinez (2005) illuminate the prospects of the pursuit of personal and ideological self-interest in teacher leaders' relationships with their principals.

No doubt there are other examples of bad teacher leadership in the literature, but they are difficult to find. We do not notice or perhaps do not want to notice that teacher leadership may be bad. We may not like to entertain the possibility that a mechanism believed to promote greater democratization of the workplace and the professionalization of teachers may not be particularly effective in achieving either or in improving schools or student learning. While we may feel a little more comfortable acknowledging the prospects for ineffectiveness, we may be much more reticent to acknowledge that teachers to whom leadership is entrusted might act unethically. Perhaps this is what Kellerman (2004) is trying to tell us. The presumption of goodness clouds and limits our thinking about teacher leadership. Without sufficient attention to the possibility of badness we will have an incomplete picture of teacher leadership.

The Myth of "The Natural"

In addition to a presumption of goodness, there is a prevailing sense that good teachers make good teacher leaders. That is, teachers who are effective with students will naturally be effective in leadership work with fellow teachers, administrators, and other adults. The corollary is that good teachers can become teacher leaders with little or no preparation or support.

Kellerman's (2004) work makes this presumption problematic too. She contends that one of the reasons we get bad leadership is that we get bad leaders. In other words, we sometimes select as our leaders people of weak character and with insufficient competence – knowledge, skills, and dispositions – for the job. Kellerman's observations issue an interesting challenge. On one hand, she is telling us what is already well established in the literature on teacher leadership – that knowledge, skills, dispositions, and character matter in the performance of teacher leadership and that selection, preparation, and support of teacher leaders is crucial. The twist and the challenge, something ever so clear if we stop to think about it, is that those who select, appoint, and provide development opportunities and support for teacher leaders, even teacher leader "followership," that is, those who teacher leaders are to work with and serve, are responsible in substantial degree for the goodness or badness of teacher leadership. In other words, we get what we ask for.

All of which makes it even more imperative to underscore what the literature tells us. Surely, there may be teachers who are "born" to teacher leadership. But like the presumption of goodness, the presumption of "the natural" leader seems both wrongheaded and reckless. Murphy (2005) and others (e.g., Lieberman & Miller, 2004; Little, 1988) are clear that the knowledge and skills required for classroom teaching and teacher leadership are substantially different and that difficulties arise when teacher leaders are "recruited straight out of the classroom" with little regard for preparation or support (Little, p. 98). According to Murphy, the knowledge and skills required for teacher leadership include (a) an understanding and ability to navigate the school organization; (b) the ability to work productively with other adults; and (c) the ability to build "a collaborative enterprise," meaning the ability to promote teaming, collaboration, and joint learning, problem solving, and action. Murphy points to others who have identified similar "domains" (Kateznmeyer & Moller, 2001; Wasley, 1991; Zimpher, 1988). Smylie and his colleagues (2002) have also emphasized the importance of substantive knowledge of the problem and task at hand, substantive knowledge of the context of the problem and task, as well as the process knowledge and skills that others emphasize.

The point is driven home by Lieberman and Miller (1999) who remind us that the literature consistently indicates that "creating leadership roles without providing opportunities for learning how to enact those roles … leads to failure and despair"

(p. 91). Barth (1988) also tells us that "most teachers … need assistance if they are to become successful school leaders" (p. 641). Unfortunately, even though it all seems axiomatic and well-established in the literature, there is good reason to believe that many teacher leaders are poorly prepared for and supported in their work. The research that Murphy (2005) reviews tells us that teacher leaders are the first to admit that they lack knowledge and skills to perform their leadership work well. Murphy observes that there is little in most teachers' pre-service education to help them develop the knowledge and skills required by leadership work and that ordinarily there is little opportunity to "nurture" leadership potential. He also observes that teacher leaders often report inadequate preparation through professional development before or during the performance of their work. They are frequently "forced to learn the new role just by doing it" (p. 146, citing Gehrke, 1991). These are ingredients of a recipe for bad teacher leadership.

The Leadership Paradox

The literature on teacher leadership reveals a paradox – that the development and performance of teacher leadership depends fundamentally on administrative leadership. According to Smylie and his colleagues (2002) this paradox applies not only to formal teacher leader roles but also to forms of teacher leadership, such as self-managed teams, that serve as substitutes for administrative leadership (see Bass, 1990; Yukl, 2002). The basic idea is that successful teacher leadership does not happen on its own and that administrative leadership plays an essential role in its success. It is, as Murphy (2005) observes, "not a chance organizational event" (p. 137).

There are several dimensions to the administrative role. First, administrative leadership, especially principal leadership, should establish a context for teacher leadership and to provide support for and manage the development and performance of teacher leadership. According to Smylie and his colleagues (2002), for teacher leadership to work well principals may be required to set examples of leadership behavior; provide incentives, guidance, and support; and establish means of accountability. They may need to keep leadership focused on meaningful tasks. And, they may need to know how to develop, support, and manage different forms of teacher leadership well. Murphy (2005) makes a similar observation, arguing that for teacher leadership to succeed, principals may need to

set the stage for teacher leadership and allow teachers to seize the opportunity ..., set a climate that encourages ... teachers' attempts to lead ..., develop, support, and manage these new forms of leadership ..., and set broader vision, goals, expectations, and 'strategic intent' that are at the center of efforts to operationalize teacher leadership. (p. 137)

Administrators must do more than "[align] structures and resources to support the leadership work of teachers" (York-Barr & Duke, 2004, p. 288). The development of teacher leadership is very likely to redefine the nature of principals' work, intended and foreseen or not. According to Murphy (2005), teacher leadership "changes the

metric of work in schools" (p. 130). At minimum, teacher leadership redefines that nature of the working relationship between principals and teachers who take on new leadership work. Most likely teacher leadership will make a difference in the allocation of tasks and responsibilities and it will introduce changes in spheres of prerogative and influence held by both principals and teachers. In Barth's (1986) words, teacher leadership shis the relationships between principals and teachers from "parallel play" to "collaborative play." Unresolved tensions may readily compromise the performance and outcomes of teachers' leadership work (Smylie, 1997).

Thus, the success of teacher leadership depends not only on how well teachers perform their new leadership work but also on how principals perform their new leadership work. Recalling the myth of "the natural," it is probably wrong to presume that principals (or district-level administrators for that matter) possess the knowledge, skills, or the inclination to adjust their roles and perform their redefined work well (Smylie et al., 2002). Traditionally-prepared principals may have substantial difficulty adjusting to their new work with teacher leaders (Murphy, 2005; Teitel, 1996). Principals may struggle with the expansion of teacher influence into areas of work that were once their own and with how to negotiate and share influence in newly defined authority relationships with teachers (Smylie & Brownlee-Conyers, 1992). New trust relationships might also need to be established (Smylie, Mayrowetz, Murphy, & Louis, 2007).

All this points to the need to develop principals' capacity for supporting teacher leaders and for performing effectively their own new roles and responsibilities. As Murphy (2005) concluded from his read of the literature "professional development should not be confined to the individuals assuming new roles or functions" (p. 144). However, it is possible, even likely, that the imperative to develop and support teacher leaders may obscure the need for administrator development. And that may cause serious problems. In a school district that one of us studied for a number of years, an extremely successful effort to develop teacher leadership was jeopardized because the district neglected the development and support of its principals. The district's initial success in teacher leadership was due in large part to a group of veteran principals who understood the aims, processes, and issues of teacher leadership development and these principals were able to adapt their own work accordingly. But after a few years, a number of them retired and in the absence of district-level professional development and socialization, their successors struggled and in their struggle compromised the work of teacher leaders. This story is consistent with a general observation made by York-Barr and Duke (2004) that "intentional and systematic efforts to support the capacity of teachers and principals to share in school leadership functions appear to be severely lacking" (p. 288).

The administrative role in developing and supporting teacher leadership may be complicated and perhaps compromised by pressures from heightened external accountability, especially testing policies. The situation may be particularly problematic in schools under severe stress or sanction under these policies where the stakes are perceived to be high, places where one might think that teacher leadership could contribute a great deal. These districts could include low-performing, low-resource inner city and rural schools as well as elite suburban schools contesting for the upwardly mobile parents and struggling with the "achievement gap" (Grant, 2000). In her study of standards-based accountability reforms and school improvement, O'Day (2002) contends that high-stakes accountability policies can introduce maladaptive or perverse incentives that work against long-term improvement. Drawing on theories of organizations in crisis, she argues that intense external stress can push organizations to adopt short-term, often symbolic, strategies to reduce stress, to rely on current knowledge and assumptions that restrict information processing and learning, and to revert to familiar behaviors rather than experiment, innovate, and risk failure. With particular relevance to this discussion of teacher leadership, organizations under extreme external stress tend to centralize authority in efforts to increase a sense of internal control and stability. They are inclined to abandon collectivity activity in favor of individual action. Finally, they are likely to "circle the wagons" and insulate and buffer themselves against additional external influences.

O'Day (2002) found some of these tendencies in schools in Baltimore that have operated under a combination administrative-professional accountability system. She found more of these tendencies in Chicago schools that have operated under a high-stakes outcomes-based bureaucratic accountability system. Other studies of Chicago schools also illustrate these tendencies (e.g., Lipman, 2002), including one that revealed system-wide declines among elementary schools in inclusive school leadership, joint problem-solving, teacher influence in school-level decision making, and principal support for change in the 3 years following the introduction of these high stakes accountability policies (Sporte, Smylie, Allensworth, & Miller, 2003). To further illustrate, Fink's (2003) case study of a Canadian high school showed a number of unintended consequences associated with increasing external accountability through high-stakes government standards and testing policies. That case demonstrates how these policies undermined teacher collegiality within departments and between teachers and school administrators and how they focused and intensified the nature of teachers' and administrators' work in ways that reduced informal teacher leadership activity and suppressed innovation and efforts aimed at long-term improvement (see also Valli & Buese, 2007). Spillane and his colleagues' (2002) more positive cases of Chicago schools and principals operating under high-stakes accountability policies indicate that such tendencies are not inevitable. Indeed, one of the principals in their study used increased external pressure as an impetus for seeking improvement and building teacher capacity for change that might well have included teacher leadership development. The published report of this study did not address this possibility. However, another study of school response to a moderate-stakes accountability system in Maryland documented instances of teacher leadership arising from the need to meet accountability objectives (Firestone & Mayrowetz, 2000).

The point is that increased external pressure and stress from accountability policies may create conditions under which it is much more complicated and more difficult for some administrators to develop and support teacher leadership. Given the theory about organizational response to extreme external stress and evidence we have discussed here, we might go so far as to say that there is a good chance that the pressure and stress associated with these policies may pull schools in exactly the opposite direction than that which is conducive to teacher leadership – toward consolidation of principal influence,

toward individual as opposed to collective and collaborative activity, and toward the well-worn and safe rather than the innovative, risky, and long-term improvements.

The New "Them"

Teacher leaders, in formal or informal roles, can easily disrupt the culturally accepted routines of schooling because their existence signals a shift toward collaborative work. As a result, they "obscure the previously clear boundaries" (Hart, 1990, p. 510) between administrator and teacher and tend to operate in a kind of "netherworld" in between (Datnow & Castellano, 2003, p. 204). Moreover, teacher leaders sit in a position that is potentially awkward both politically and socially because "regular" teachers in the school may view teacher leaders as the new "them," as in they that try to influence and interfere in what "we" do.

This phenomenon poses fascinating dilemmas for the school organization in general and the teacher leader specifically. On one hand, because of their expertise in the classroom, teacher leaders are well-positioned to help other teachers develop professionally, improve their practice, and eventually increase student learning in a school. Of course, this is part of the conventional wisdom that makes teacher leadership so attractive. On the other hand, teacher leaders, especially in formal teacher leader positions, can interrupt the social fabric of the school as an organization (e.g., Hart, 1990).

There are several possible ways in which teacher leaders can potentially alter the social relationships within schools negatively. First, the mere existence of teacher leaders violates a professional norm of egalitarianism or equality among teachers and the work of a teacher leader will likely breach other cultural norms that govern relationships among teachers such as autonomy, privacy, non-interference, and non-judgment (Smylie, 1997). From a political perspective, the establishment of teacher leader positions can introduce a new hierarchy into relationships among teachers (York-Barr & Duke, 2004). Now in a less powerful position relative to their peers (or former peers), "regular" teachers may try to "defend turf" from teacher leaders (Boles & Troen, 1996, p. 44). In the most extreme cases, regular teachers may actively resist the efforts of teacher leaders and even "banish [them] from the ranks of the collegium" (Katzenmeyer & Moller, 2001, p. 80). Of course, if political tensions rise to levels like these, the likelihood for school improvement to result from teacher leadership is remote. In these negative circumstances, teacher leaders themselves can easily become personally disheartened. Relationships with colleagues and friends can be strained or even lost (Little, 1990; York-Barr & Duke, 2004). Teacher leaders can struggle in these situations, questioning their professional identities and social attachments (Murphy, 2005). They may even decide that becoming a teacher leader wasn't worth all of the hassle and heartache (Hart, 1990; Smylie, 1992).

Given evidence from the literature (e.g., Hart, 1990; Smylie & Denny, 1990), it is clear that the relationships that teacher leaders have with their teaching colleagues will fundamentally affect the development, performance, and effectiveness of teacher leadership initiatives. If nothing else, the work of teacher leaders to promote school and classroom improvement necessarily involves working productively with other teachers. Schools that do not consider these potential negative impacts of teacher leadership for the school organization and for the teacher leader do so at their peril.

Who Is a Leader Anyway?

The push for more teacher leadership in schools runs parallel to an on-going discussion in the organizational and educational leadership literatures about what leadership means in the first place (Yukl, 2002). In common parlance, terms like leader and administrator are used interchangeably because many people assume a role-based definition of leadership. Specifically, a principal is called the leader of her school simply because she has unique responsibilities and authorities that no one else in that organization does. In this view teacher leadership means that a teacher is placed in a position where he also has responsibility and authority over others (e.g., a mentor, lead teacher, or content coach).

During the past decade though, scholars in the field of educational leadership have tended to de-emphasize formal role and define leadership as existing in more diffuse terms organizationally. The field has recognized several collaborative or organizational leadership models in recent years, including the leadership functions of teacher research, distributed leadership, and the formal and informal leadership of teams (Smylie et al., 2002). Some scholars have defined leadership in terms of work or activity, arguing that individuals who perform one (or more) of particular functions are leaders, no matter what their official title is (Firestone, 1996). In the context of school reform, some of these functions have included (a) providing and selling a vision; (b) providing encouragement and recognition; (c) obtaining resources; (d) adapting standard operating procedures; (e) monitoring the improvement effort; and (f) handling disturbances (e.g., Heller & Firestone, 1995). In the simplest terms – leaders are as leaders do.

Some scholars have fore-grounded another important aspect of leadership found in many definitions of the term, specifically that leadership is a process of social influence (e.g., Yukl, 2002). Anyone who influences another to act in a particular way is considered a leader. Thus, teachers can be influential leaders in a school without formal title or administrative responsibility. Among the widely cited ways of thinking about leadership in this way is the notion of distributed leadership, or more accurately, the distributed perspective on leadership (Spillane, Halverson, & Diamond, 2001). According to the distributed perspective, leadership is "not just a function of what leaders think and do" (Spillane et al., p. 23) but an activity embedded in a context of interactions of people and tools that influence others in ways "tied to the core work of the organization," (Spillane, 2006, p. 11). In the same family of concepts are theoretical perspectives on leadership substitutes (Bass, 1990; Kerr & Jermier, 1978; Pitner, 1988). In general, these perspectives suggest that the structure and processes of work and social groups can exert degrees of social and normative influence over organizational members and thus serve as substitutes for external administrative leadership, particularly administrative initiative, monitoring, guidance, and control.

The growing trend of supplementing or replacing role-bound conceptions of leadership with conceptions of leadership as the performance of particular functions or

as processes of social influence has not only expanded who is considered a leader but what leadership means. One effect has been the explicit recognition of the existence of teacher leadership even among teachers who do not hold formal titles. Other effects have been less salutary. With the understanding that leadership consists of performing multiple tasks and the mandate to influence, some scholars have bemoaned the field's increasing expectations for the capacity of leadership as a concept and as actual work. For example, Gronn (2003) has observed of leadership that

[I]ts conceptual and explanatory space has now become unduly stretched, inflated and bloated by commentators who, frankly, in their accounts of how schools and other organisations might be expected to operate and accomplish their purposes, have imposed far too heavy a burden of expectations on it. (p. 285)

Another difficulty with the definition of leadership as social influence "tied to the core work of the organization" is that in practice, influence dynamics permeate entire organizations. Scholars have long recognized that influence operates in multiple directions, especially upward, in school organizations (Mowday, 1978). Moreover, given this broad definition, it becomes nearly impossible to determine where leadership ends and where work performed in accordance with one's regular job responsibilities begin. So, if a science department chair submits the paperwork for the purchase of a new set of instructional kits, is that leadership or part of her regular job duties? If a teacher's spouse persuades him to attend a professional development session on promising literacy instructional strategies is that leadership or is it just influence? In short, the definition does not help us "demarcate *leadership* practice from any other practice that teachers and principals engage in" at least using empirical means (Lakomski, 2005, p. 67, emphasis in the original). Indeed, some have argued that leadership, as a concept tied to organizational goal attainment, may have outgrown its utility (e.g., Lakmoski, 2005).

We offer no definitive guidance here for studying or developing teacher leadership. However, we suggest that researchers exercise care to clarify what counts as leadership in their studies and their initiatives and what does not. Just like scholars and educators who have used the leadership function model tied to the accomplishment of a specific organizational objectives, such as the implementation of a social problem solving curricular program (Heller & Firestone, 1995) or the inclusion of students with special needs in general education classes (Mayrowetz & Weinstein, 1999), perhaps requiring that the process of social influence is directed toward the accomplishment of specific organizational goals, instead of just "tied to" the work, is the proper line to draw to distinguish regular work from leadership work.

Closing Observations

Readers should not finish this chapter and conclude that efforts to develop teacher leadership are wholly misguided or fruitless. We acknowledge that teacher leadership has potential for making positive contributions to schools, although, the evidence to date indicates that its presumed benefits should not be considered foregone conclusions.

Our purpose in this chapter is to offer insights into complexities, make some assumptions problematic, and emphasize the importance of issues in the development and practice of teacher leadership that many who study or promote it have not fully recognized or explored. Specifically, we demythologize the goodness of teacher leadership and teacher leaders, and debunk the assumption that good teachers are necessarily of natural teacher leaders. We recognize the crucial, paradoxical, and potentially problematic role of administrators in making teacher leadership work and potential barriers presented by social and political tensions which can easily arise when teachers become leaders, especially when they assume formal leadership roles. Finally, as our field re-examines the very meaning of leadership, we need to be mindful of definitional and conceptual conundrums that are likely to impact future teacher leadership research and practice. We close not with any resolution of these matters but with the hope that this discussion may spark some new thinking, suggest new directions for inquiry, and bring into greater focus some of the problems and dilemmas that need to be engaged if teacher leadership is to be better understood and promoted and practiced effectively.

Biographical Notes

Mark A. Smylie is Professor of Education at the University of Illinois at Chicago. He received his PhD from Vanderbilt University. Smylie's research focuses on school organization and change, teacher and principal leadership, teacher learning and development, and urban school improvement. His recent work examines the development of distributed leadership in secondary schools, the role of trust in leadership development and policy implementation, and relationships among leadership, urban school development, and the improvement of teaching and learning in classrooms. Smylie's work has appeared in the *American Education Research Journal, Educational Researcher, Educational Administration Quarterly, Educational Evaluation and Policy Analysis, Educational Policy, The Journal of School Leadership, Leadership and Policy in Schools, and Review of Research in Education.* He has contributed chapters to the second edition of the Handbook of Research on Educational Administration and to international handbooks on teachers and teaching and on educational change. Recently he co-edited a book for the National Society for the Study of Education on developing the teacher workforce.

David Mayrowetz is associate Professor of Education at the University of Illinois at Chicago. He received his EdD from Rutgers University. Mayrowetz researches the formation and implementation of educational policy and the influence of contextual factors at the individual, organizational, and institutional levels on these processes. His two most recent research projects focus on the formation of special education policy in the judicial branch and the implementation of a distributed leadership initiative in secondary schools. Mayrowetz's work has appeared in *Educational Administration Quarterly, Educational Evaluation and Policy Analysis, Educational Policy, The Journal of Cases in Educational Leadership, Journal of School Leadership, Leadership and Policy in Schools*, and *Teachers College Record*.

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SEX SEGREGATION AND TOKENISM AMONG TEACHERS

Barbara J. Bank

At the present time in the United States and most other countries, the majority of teachers at the elementary and secondary school levels are women. That this was not always the case has been widely documented by historians and other social scientists who use the term feminization of teaching to describe the process of change that occurred in the nineteenth century as the majority of men teachers became a minority, and women assumed the overwhelming majority of teaching positions throughout the United States. Before this happened, patterns of sex segregation varied across the nation from rural to urban areas, from summer to winter, and from region to region (Perlmann & Margo, 2001). At the start of the Civil War in 1861, and for many decades prior to that, far higher proportions of women teachers were employed in the Northeast than in the South. Although regional differences persisted into the twentieth century, by the start of that century, women constituted the majority of teachers in all regions of the country and, by 1910, they were the majority in every state. Although United States census figures reveal some fluctuations in the size of this majority during the twentieth century, the proportion of teachers who were women in 1900 (74.0%) was about the same as the proportion who were women in 2000 (75.5%), the most recent year for which full census data are available.

Although census data are not disaggregated by grade level and sex, some states provide that information, and those that do show that, although women predominate at all grade levels of teaching, their proportional representation is highest in elementary schools. In the state of New York, for example, 89% of elementary and 71% of secondary teachers were female in 2002–2003. In many other states, the proportion of elementary school teachers who are women is over 90% while the percentage of women among high school teachers dips below 60%. National data by subject matter are also hard to find, but most studies of state or local school districts indicate that men and women are unevenly distributed across subject matter teaching assignments with women dominating in literature and the humanities and men in mathematics and the physical sciences. The overall feminization of teaching also occurred in the nineteenth century in Britain, Scotland, Canada, Australia, and New Zealand, but it was not until the first half of the twentieth century that a feminized teaching profession emerged in the Catholic countries in Europe, Latin America, and the Caribbean. In some of these countries, as in the English-speaking countries, this feminization

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching, 291–302.* © Springer Science+Business Media, LLC 2009 of teaching was due to abandonment by men and an influx of women. In other countries, however, the teaching profession was feminized from its inception, and the incorporation of women into teaching coincided with the consolidation of State-run educational systems or with policies to expand public education systems (see Cortina & San Román, 2006).

In all countries, the supervision and control of women's work initially remained in the hands of men who held the positions of supervising teachers, principals, superintendents, and other educational officials. And, in many countries, men continue to hold the majority of positions in educational administration, especially at the highest levels. In the United States, for example, about 56% of all school principals were men in 2000, but as with teachers, men's proportional representation among principals was lower at the elementary school level (about 45%) than at the middle and high school levels (69% and 79%, respectively).

Although the proportion of educational administrators who are women has increased in recent years, the increase does not represent a long-term progression. Tallerico (2007) points out that, although the proportion of US principals who were women increased from 25% in 1987–1988 to 44% in 1999–2000, more than half of all US principals were women in the late 1920s. Tallerico also notes that claims about recent increases in the proportions of women becoming school superintendents may be distorted by variations in the ways that superintendent positions are defined as one moves across school districts and states (e.g., Are associate and assistant superintendents included? Are Pre-K-8 systems counted along with Pre-K-12 systems?).

Given these cautions and the historical evidence, two conclusions seem warranted. First, teaching has been a feminized occupation for many years, and sex segregation in the teaching profession has not changed much in the United States or most other countries in recent decades. Second, educational administration has always been and remains a masculinized occupation and, although sex segregation in educational administration seems to have declined in recent decades, it has declined least at the highest levels of power, status, and authority, and the declines that have occurred may not be evidence of long-term trends that will continue into the future.

Theories of Sex Segregation

Several theories have been advanced to explain why sex segregation occurs in occupations and why it does or doesn't change over time. These include theories focused on economic costs, human capital, gender construction, socialization, the devaluation of women, tipping, queuing, and alternative job opportunities. What explanations are central to each of these theories, and how well do they explain patterns of sex segregation among educators?

Historians seeking to explain the feminization of teaching usually point to *economic costs* as the chief explanation for the shift from a majority male to predominantly female teaching profession. Simply stated, economic costs explained the switch by focusing on the fact that women teachers could be paid less than men teachers, an important consideration for school boards seeking to staff schools especially

when those schools were growing in size and complexity as they were in urban areas during the second half of the nineteenth century. Throughout that century, however, women almost everywhere received lower wages than men in teaching. According to Perlmann and Margo (2001), the major exception was in the antebellum South where the agricultural wage ratio for men and women was much less skewed than it was in the rest of the country with the result that wage ratios for men and women in non-agricultural employment, such as teaching, were also more equivalent than elsewhere. As a result, the feminization of teaching proceeded more slowly in the Southern states.

Outside the South, the fact that women would accept teaching positions at lower – often much lower – salaries than those paid to men was not the only consideration school boards took into account when hiring teachers. Yes, they wanted to save money, but they also wanted to hire the best teachers. Their decisions about who was best were often guided by two theoretical frameworks: *human capital theory* and *gender construction theory*. Human capital is defined as the amount and type of education, training, and job experience a person possesses. Within the framework of human capital theory, hiring decisions, as well as salaries and promotion, are supposed to be based upon the human capital a person brings to the job. Those with more relevant education, training, and job experience should receive higher pay and more promotions than those with less. Although there may have been times and locations in which men brought more human capital, on average, to the teaching profession than women, neither historically nor at the present time can differences in their accumulation of human capital explain why women outnumber men in teaching or why they are less likely to obtain positions in educational administration.

A better explanation for hiring patterns seems to be provided by gender construction theory with its emphasis on the importance of the ways in which masculinity and femininity are constructed within cultural ideologies and behavior patterns. Back in the eighteenth century, an ideology of separate spheres emerged according to which men were thought to be more suited for the more public, rational, authoritative, competitive, strenuous, instrumental, aggressive activities of society, and women were deemed to be more nurturant, warm, expressive, cooperative, moral, and patient. It was these "motherly" characteristics that were thought to suit women, more than men, for the care and teaching of young children. It was less certain, however, whether women were capable of disciplining and controlling older students, especially older boys. As a result, it was common in the early half of the nineteenth century to find women teaching in summer school sessions which were attended primarily by girls and younger children but to have men take over in the winter school sessions when the older boys were more likely to attend because they were no longer needed as farm laborers. Also, as urban schools began to be divided into grade levels, women were more likely to teach in the primary grades while men were employed to teach the upper grades.

Despite these customs, there were some circumstances that pulled men away from teaching and gave women the opportunity to show that they were competent to teach the older students. The Civil War was one such circumstance that accelerated the feminization of teaching in the United States, but the feminizing trend was already underway before the war and was strengthened after it because of the large numbers of new jobs that were being created as the US economy industrialized, new technologies were invented and developed, and the size and complexity of businesses and governmental agencies increased. As the school year lengthened but teachers' salaries failed to increase accordingly, men began to move out of teaching and into the growing number of other occupations available to them (but not to women), thereby creating ever more opportunities for women to demonstrate that they could do as good a job of teaching older students, including males, as the men teachers, and that they would do it for less pay.

Today, it would be considered illegal for women to be paid less than men for the same teaching assignments. Nevertheless, there are ways of giving some teachers (often men) extra salary for assuming special administrative duties, such as heading academic units or departments, or extracurricular assignments, such as coaching or supervising the school paper. Often these special assignments - and particularly promotions to higher level administrative positions - are made because of traditional assumptions about what men and women do best and enjoy doing most rather than because of careful assessment of men's and women's human capital or an effort by a school board to save money. Thus, economic-cost and human capital theories are not often used to explain sex segregation in the contemporary teaching profession. In contrast, to the extent that women are considered more suited than men to be elementary, particularly primary, school teachers and men are considered to be better school and community leaders, adherence to traditional gender ideology continues to be a major reason for sex segregation in both teaching and educational administration. And, until people no longer endorse traditional stereotypes about gender, the gender roles that women and men have traditionally constructed in the domestic sphere since the late eighteenth century will continue to extend themselves into the occupational sphere of education.

When it comes to elementary school teaching, there are two related perspectives predicting that, as women become more numerous in a job, men are less desirous of entering it. According to these views, as occupational fields become more feminized, men become more likely to avoid them because the men want to avoid the stigma of doing "women's work." One of these perspectives is called socialization theory which argues that socialization by parents, peers, or the media is a gendered process in the sense that it encourages men to avoid activities, including occupational fields, that are heavily feminized. Although women may also be socialized to avoid jobs that are heavily masculinized (a possibility consistent with gender construction theory), the higher pay associated with "men's jobs," such as being a school superintendent, may greatly reduce the stigma that would otherwise be attached to doing work that is regarded as gender inappropriate or, at least, gender unusual. For men, however, the socialization perspective is closely related to the devaluation-of-women perspective, a theory which argues that women are culturally devalued in comparison to men, and this devaluation of women leads to the devaluation or stigmatization of everything associated with women, including their jobs (England, 1992).

Some theorists take devaluation theory a step further, arguing that the feminization of occupations results from tipping. *Tipping theories* (e.g., England et al., 2007; Schelling,

1971) advance the idea that, as neighborhoods become racially integrated or jobs become integrated by gender, some members of the previously dominant group (Whites, males) begin to feel uncomfortable enough to leave the neighborhood or job, thereby opening more opportunities for the minority group (Blacks, females) to move in. This movement creates further discomfort among a larger proportion of the dominant group until a tipping point is reached in which the neighborhood tips from largely White to largely Black or the job tips from largely male to largely female. Tipping theory adds little, if anything, to the explanation of the feminization of teaching provided by socialization and gender construction theories. Not only was there no single tipping point in the gender composition of the US teaching force, but the notion that men left teaching because of their biases against women whom they perceived to be invading their occupation is not borne out by the historical evidence in the United States, much less in other countries.

Even *queuing theory*, one of the more popular explanations of occupational sex segregation (see Reskin & Roos, 1990), seems to be of limited use as an explanation of sex segregation in the teaching profession because of the heavy emphasis it places on the preferences and biases of male employers and workers. According to queuing theory, it is these biases and preferences that shape the structure of labor markets so that they favor men and disadvantage women even when women are allowed or encouraged to enter a formerly male-dominated occupation. It is certainly true that (mostly male) school boards in nineteenth-century America (while teaching was becoming feminized) often paid women less than men for the same work, and it is also true, as noted above, that this practice continues to this day often under the guise of compensating men for "special assignments" for which they are said to be more qualified than women. In most countries at the present time, it is generally fair to say that men tend to outnumber women in the teaching and educational administrative jobs that command the highest salaries and give their incumbents the most autonomy, power, and prestige. In contrast, women tend to outnumber men in lower-paying jobs.

What is less certain is whether this practice is best explained by the male prejudices emphasized in queuing theory (and in devaluation-of-women theory) or by the broader cultural framework that is central to gender construction and socialization theories. A recent study by Paula England et al. (2007) of academic fields in the United States that are becoming feminized found no evidence that fields with declining relative salaries deter the entry of men, as would be predicted by queuing theory. Their study also challenges devaluation theory in that it found no consistent negative effects of feminization of academic fields on average salaries paid to women and men with doctorates in those fields. And, some support for gender construction and socialization theories emerged from their finding that men and women generally continued to choose the same fields each gender had chosen in the past, even when many more women received doctorates. Although these findings are not based on a study focused on teachers and educational administrators, they do suggest that established constructions of "masculine fields" and "feminine fields" have powerful effects – even more powerful than salary – on the occupational choices of men and women.

Nevertheless, as happened in teaching, those choices can change over time, and one of the major reasons for the change (or lack of it) is the range of job opportunities and wage levels available to men and women. As mentioned earlier, Perlmann and Margo (2001) pointed to job and wage opportunities outside of teaching to explain why the feminization of teaching moved more slowly in the antebellum South than in the rest of the United States. Similarly, as noted above, many more job opportunities opened up for men than for women in the late nineteenth century. Even today, women tend to be concentrated in far fewer occupations, including teaching, than men. Also, the salaries paid to teachers tend to be relatively better than the salaries earned by most women, but teachers' salaries rank considerably lower among the salaries currently earned by men. This line of argument suggests the importance of what might be called *job opportunity theory* for explaining why teaching remains a relatively more popular job choice for women than men.

It would be consistent with job opportunity theory to argue that, as women's opportunities for job training and employment become more like those of men, women will become less interested in teaching. To some extent, that prediction is being realized already as evidence begins to appear showing that some of the best and brightest college women are deserting teacher training for better-paying, higher-prestige occupations. Yet, many women continue to be attracted to teaching for reasons that lend support to both gender construction and socialization theories. Like young men. young women often plan lives that will combine labor-force participation with marriage and family. Unlike young men, however, many young women realize that most of the responsibilities for family life, including childcare and housekeeping, will fall on them. One way to reduce the stresses that will result from trying to combine family responsibilities with the responsibilities of employment is to seek a job with a yearly calendar and daily time clock similar to what their children will have during their school years. As a result, many women will continue to look to teaching as a profession that appears to be more compatible with mothering than most of the alternatives. While it is true that employment as a teacher would also enable men to have work schedules more compatible with those of their children, most men continue to see their wives or other women, rather than themselves, as primary caretakers of children and the home. Thus, they will be less likely than women to rank compatibility with child rearing as high on their list of desirable occupational characteristics, opting instead for higher salaries or more autonomy than teaching will provide.

This line of argument leads to two conclusions. First, the best explanation of why teaching is a feminized profession results from a combination of job opportunity theory, gender construction theory, and socialization theory. Second, given the different job opportunity structures in which men and women participate, the different ways in which males and females are characterized within traditional cultural ideology, and the different socialization processes to which men and women are exposed, it is unlikely that teaching will become less sex segregated in the near future. And, for this change to occur in the distant future will require not only continued improvements in the employment opportunity structure for women but also enormous changes in gender socialization and in the social construction of masculinity and femininity.

When it comes to educational administration, for reasons already given, job opportunity theory, gender construction theory, and socialization theory also provide better explanations than devaluation, economic cost, human capital, tipping, and queuing

theories for why men continue to hold more positions in educational administration than women do at the present time. What is less clear, as noted above, is whether the gender composition of educational administration will become increasingly more feminized in the future. Job opportunity theory suggests that the answer to this question depends heavily on the differences between salaries available to educational administrators compared to male and female executives in other sectors of the economy. If, as is happening in some US school districts and universities, administrative salaries in education decline in relationship to what men (but not women) with comparable human capital can earn outside of education, then job opportunity theory would predict a continued exodus of men from educational administrative positions and their replacement by women. The consequence in the short run would be a decrease in sex segregation among educational administrators, but in the long run sex segregation of a feminized sort would appear and increase. Although such outcomes are possible, the cultural tendencies to regard men as more suitable leaders than women are sufficiently strong and widespread to suggest that such outcomes are not likely in most countries in the near future. And, they may be even less likely in the United States where individualized salary negotiations continue to increase salaries and benefits of high-level educational administrators way beyond those paid to teachers and to the increasing numbers of lower-level educational administrators.

Tokenism and Other Consequences of Sex Segregation

Sex segregation, like racial segregation, is often considered to be a condition of uniformity within groups and exclusion between them that is morally offensive and also is, or should be, illegal. Because segregation is regarded as such an obviously "bad thing," there has been little theorizing or research concerned with types of segregation and their possible consequences. One exception is the theory of numbers developed in the 1970s by Rosabeth Moss Kanter in her now classic book titled Men and Women of the Corporation. This theory suggests that tokenism, defined as belonging to a gender group that comprises less than 15% of all members of a particular occupation in a particular organizational setting (i.e., a particular job), is an especially negative form of sex segregation. When applied to school principals, for example, this theory predicts that women will have particularly high levels of job stress if they are working in a school district in which they are token women who constitute less than 15% of all the principals. When applied to teachers, the theory predicts that men who teach in elementary schools where less than 15% of teachers are men would experience higher levels of job stress than their female counterparts or than male teachers who are not tokens.

As these predictions indicate, Kanter's theory is premised on the assumption that many of the problems that women experience when they enter traditionally and predominately male occupations are due to structural circumstances, such as their tokenism, rather than to gender per se. Women who are tokens, argued Kanter, are highly visible which puts them under extreme performance and evaluative pressures. Not only are their mistakes more likely to be noticed than those of their male counterparts, but tokens are also likely to be subject to the perceptual distortions of contrast and assimilation. By contrast, which she also called "boundary heightening," Kanter meant the tendency to polarize or exaggerate the differences between the female tokens and the male dominants, and she used the term assimilation to refer to the tendency to distort one's perceptions of a token woman to fit the stereotypes or cultural generalizations about all women that are part of a society's or organization's dominant gender ideology. So, instead of being judged on their own individual merits, token women are often treated as symbols or representatives of their gender who are likely to be judged on their femininity including their physical appearance and their willingness to make members of the dominant group look good. As a result, token women must walk a difficult tightrope. They are pressured by their visibility to perform well on the job but also pressured not to perform too well lest they make their male colleagues look bad.

Since its publication, several scholars (see, e.g., Williams, 1989, 1993; Zimmer, 1988) have criticized Kanter's theory, arguing that it is not really a gender-neutral, structural theory about the consequences of sex segregation in employment. Not enough emphasis, they argue, has been given to gender differences in the experience of tokenism. They ask whether men who enter female-dominated occupations experience the same disadvantages as women in sex-atypical jobs. Echoing the devaluation theory discussed above, they suggest that token men may be advantaged due to the general cultural preference for men and masculinity and the devaluation of women and activities associated with them. Although researchers have tested this suggestion by examining a number of different occupational groups, there often are so many differences between the occupations being studied that it is difficult to separate out the effects of tokenism and of gender from the effects of other occupational characteristics (see, e.g., Williams' 1989 comparison of women marines and male nurses). Despite this difficulty, findings from these studies indicate that token men are benefited by the cultural preference for masculinity and also that men are strongly discouraged from entering female-dominated occupations because of the challenges to their own masculinity that result from doing so.

Methodologically, school teaching provides one of the best occupations in which to examine the experiences of men and women as token employees. As noted above, men in the United States have been in a token position in elementary school education for more than a century, but in secondary education, the sex ratio is less skewed. In 1990, about 15% of elementary and 42% of secondary teachers were men, and in many school districts, women constituted only the token minority of teachers in several secondary school subjects, such as science and mathematics, until quite recently. Two researchers who have taken advantage of this pattern of sex segregation in the teaching profession to examine the effects of tokenism in a single occupation are Andrew Cognard-Black (2004) and Gary Dworkin and his colleagues (Dworkin, 2007; Dworkin, Chafetz, & Dworkin, 1986).

Using U.S. national surveys of 5,734 secondary and elementary school teachers from 1990–1992, Cognard-Black (2004) was able to demonstrate that token men who teach in elementary school positions are 3.1 times more likely than women to be promoted into administrative occupations. Importantly, Cognard-Black (2004) was able

to present other findings suggesting that this movement into educational administration was NOT due to the fact that token men were trying harder than other teachers to escape some unique disadvantage they experienced in a predominantly female setting. Overall, men did not move out of the predominantly female occupation of elementary school teaching at a greater rate than women (although they moved out for different reasons), and there was no evidence that male elementary school teachers moved out at a greater rate than men who taught in the similar, but more sex-integrated, occupation of secondary school teaching. Instead, men seemed to be able to benefit from their token status by moving up in the hierarchy of educational positions.

What Cognard-Black (2004) did not test directly was whether or not men also suffered the kinds of stresses of tokenism that Kanter (1977) had described. Dworkin et al. (1986) did conduct such a test when they administered the Dworkin Teacher Burnout Scale (see Dworkin, 1987) to teachers employed in one of the largest school districts in the United States in 1977. The scale consists of ten items based on a sociological perspective on burnout as an extreme form of role-specific alienation. Dworkin et al. (1986) examined the relationship between the amounts of sex and racial segregation in a teacher's school and the amount of alienation experienced by that teacher, as well as the relationship between being a gender or racial token and being alienated. Although the relationships found were not strong, they were consistent with the conclusion that male faculty, and particularly white males, in sex-segregated, token positions reported less of a sense of alienation and burnout than did male faculty in non-token positions. In contrast, white (but not non-white) females in schools where the percentage of women teachers was low reported slightly but significantly higher levels of burnout than did women in programs where the percentage of female colleagues was higher.

These early findings of Dworkin and his colleagues (1986) and the findings of Cognard-Black (2004) are consistent with the conclusions of Jerry Jacobs (1993) that women are more likely to be pushed out of male-dominated fields while men are more likely to be pulled out of female-dominated fields. When it comes to elementary school teaching, the evidence summarized so far suggests that being in a token position does not cause men to experience the same high levels of alienation or performance pressures characteristic of female tokens. Instead of fleeing from a situation they perceive as negative, men seem to be pulled away from elementary teaching by more lucrative and prestigious positions in educational administration and elsewhere. And, as noted in the previous discussion of job opportunity theory, these pulls are one reason why it is unlikely that teaching, particularly at the elementary level, is going to become less feminized or re-masculinized in the future.

A somewhat different picture of male teachers in token positions emerges from Dworkin's more recent research (summarized in Dworkin, 2007) and from the research of Paul Sargent (2000). Sargent's interviews with American men who were teaching in the primary grades revealed that the men did feel that they were under closer scrutiny than the women who constituted the majority of the primary grade teachers in their schools. Like the token women studied by Kanter (1977), these token male teachers also reported considerable ambiguity concerning appropriate role behaviors with the result that they often felt themselves pushed into stereotypical and traditional forms of

masculine behaviors. These behaviors included expressions of interest in athletics (but not art and poetry), performing physical tasks in the school, acting as disciplinarians and authority figures, and serving as spokesmen for the other (mostly female) teachers. Although Sargent's findings are consistent with Kanter's structural theory of numbers, they cannot be considered conclusive because of the small, possibly non-representative sample on which they are based and because Sargent did not compare the feelings of token men with those of teachers in non-token positions.

Dworkin has continued to make these comparisons using data collected from much larger samples of teachers drawn from school districts in the Houston, Texas, metropolitan area in 1986, 1991, 2000, 2002, and 2004. Although these studies found higher rates of teacher burnout than those found in 1977 and reported by Dworkin et al. (1986), the relationship between tokenism and burnout became non-significant. Dworkin (2007) presents an interesting explanation for these findings. The overall increase in teacher burnout, he suggests, was primarily due to school reform movements that accepted the negative claims about US schools made in the Reagan administration's report titled *A Nation at Risk* (National Commission, 1983). This report assumed that schools were failing, that the primary blame for this failure lay with teachers, and that teachers must be held accountable for the performance of their students. As Dworkin (2007) points out, this report and the state and federal school reforms that were based upon it increased stress among teachers, and stress precipitates heightened levels of teacher burnout such as those that appeared in the studies Dworkin conducted after the report appeared.

Dworkin also attributes the decline in the effects of tokenism on burnout to the educational reforms in Texas that followed from *A Nation at Risk* (1983). These statewide reforms were subsequently required nationally by the federal legislation called No Child Left Behind (NCLB) that was enacted in 2001. Like the Texas laws on which it was based, NCLB mandates uniform academic standards for student performance that schools and teachers are required to meet, and penalties are threatened or imposed on schools and teachers for the failure of students to do so. Meeting these standards has become the primary criterion by which teachers – whether tokens or not – are judged. As a result, argues Dworkin (2007), there has been a relative decline in both the penalties that women formerly suffered because of being tokens in predominantly male groups and the advantages token men derived from being members of a high status male minority amidst a less valued female majority. Because of changes in educational policies, concludes Dworkin, tokenism has given way to student performance on standardized tests as a primary criterion for judging male and female teachers.

Dworkin's research and theorizing open up the broad question of the conditions under which tokenism and other forms of sex segregation have more or less impact on the job-related stresses of teachers and on their opportunities for retention and promotion. Of particular note is the fact that educational policies that are unconcerned with gender, such as NCLB, may have the unintended consequence of promoting gender equity among teachers. This does not mean that educational policies directly concerned with gender equity should be ignored or abolished. These policies probably explain why Dworkin found that by the late 1990s schools in the Houston metropolitan area no longer had only a few female tokens in what had previously been male-dominated departments, such as mathematics and the sciences. The movement of more women teachers into formerly male fields of study meant that Dworkin could test the effects of only male, but not female, tokenism in studies he conducted in the 1990s and beyond.

In the present context, the possibility that gender equity policies might explain why Dworkin and others have found recent reductions in sex segregation among teachers in formerly male-dominated secondary school subjects suggests that those policies should be incorporated into the list of possible explanations for occupational sex segregation discussed above. Although such policies may not overcome the forces of socialization and gender construction that continue to promote sex segregation, they can help to improve the job opportunities for women that may produce increased gender integration in the workplace.

Students and Sex Segregation Among Educators

Finally, it should be noted that tokenism and other forms of sex segregation in schools may have implications not only for teachers, but probably also for students. Under present conditions of sex segregation in most educational institutions, students learn that even though the majority of their teachers are women, the rules and regulations are set and enforced by administrators, the majority of whom are men. If more women continue to move into educational administration (or more men move into teaching), students may learn a different lesson in the future. In the meantime, however, an educational system characterized by rigid gender hierarchies that are historically and culturally embedded does not seem to be the best kind of environment to foster gender equality among students or to encourage them to make the kinds of nontraditional occupational choices that might bring an end to sex segregation in employment.

Biographical Note

Barbara J. Bank is Professor Emerita of Sociology and of Women Studies at the University of Missouri-Columbia. During her years at UMC, she helped to organize and develop the Women Studies Program, served as Director of Graduate Studies and Department Chair of Sociology, and was honored with a Fulbright Senior Scholar Award, visiting fellowships at the Australian National University, and awards for excellence in teaching and for outstanding contributions to the education of women. Her many scholarly presentations and publications, including *Contradictions in Women's Education: Traditionalism, Careerism, and Community at a Single-Sex College* (TC Press, 2003), reflect her long-standing interests in social psychology, gender studies, and the sociology of youth and education. She is also the organizer and editor of *Gender and Education: An Encyclopedia* (Praeger, 2007).

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Section 4

TEACHER BEHAVIOR

THE CLASSROOM AS AN ARENA OF TEACHERS' WORK

Margaret Freund

Introduction

The image often portrayed of teachers in classrooms is often a rather heroic figure, suffused with the myth of individualism. They are either pictured as strong and capable and managing the class with firm precision, or else pictured as a romantic figure expressing love and care for her students. Rather than the two dimensional Hollywood image of teachers(Ayers, 1993; Dalton, 2004), this chapter will explore how everyday life in the classroom is far more dynamic; that teachers understand their work in terms of their experience, their beliefs about students and how they relate to them and their emotional engagement with their work. Teachers work is constructed around particular beliefs that are rarely questioned, but which are understood within the concept of materiality of practices through processes of socialisation for their students and for their work practices.

This socialisation is explained in terms of teachers 'wisdom of practice' (Popkewitz, 1985, 1998), that reinforces the way things are, so that teaching practices become entrenched. The chapter will discuss the way that teachers develop a kind of 'recipe knowledge', that is informed by their understanding of the ideal child, and what they consider a 'normal' child should be. The ideal is understood as a measure against which each student is placed, a process of inclusion and exclusion, a measure of the kind of child they regard as normal and capable of being taught (Yates, Dyson, & Hiles, 2008). At the same time teaching is largely a feminised profession (Acker, 1989; Grumet, 1981), and so teachers often see their work in the classroom as that of professionally embodied mothers, work that is physically and emotionally entrenched.

Research Site

The chapter is based on ethnographic research conducted at a Catholic¹ elementary school in north-west Sydney, that I have called 'Blessed Family', a large school of almost nine hundred students and forty three teachers. It examined the nature of teacher's everyday experiences, their relationships with children and how they understood their work in the classroom (Acker, 1999; McPherson, 1972). Instead of the traditional

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching*, 305–318 © Springer Science+Business Media, LLC 2009 form of ethnography that examined these processes from a macro sociological and largely Marxist perspective(J. Walker, 1984; Willis, 1977), this research used the work of Foucault to develop an understanding and provide a lens in order to examine of teachers work (Marshall, 1996; Peters & Besley, 2007; Walshaw, 2007). One of the features of the research at Blessed Family was examining the 'busyness' of classroom life and the sense of many things happening at once, of a teacher's ability to deal with often complex situations and how that created particular forms of subjectivity for both teachers and students and a particular kind daily reality in the classroom.

Wisdom of Practice

This term has been taken to mean the values and beliefs that are sustained by school life and which give it meaning and for teachers. It encompasses theories of folk knowledge, myths and common sense ideas; in other words the taken for granted world of schooling and everyday practice. It is a sense of knowing that is practical rather than theoretical and is concerned with technologies of managing the classroom and experiential knowledge by which the teacher orders and controls learning (Acker, 1999; Nias, 1989, 1999).² Knowing what 'stage' the student has reached is part of this recipe knowledge that is internalised. Popkewitz (1998) and others point out, often the kinds of knowledge that are internalised through teacher training and through experience are those that govern teacher's notions about inclusion and exclusion (R. Walker, 2003). Calderhead (1998) describes teachers going through stages of development and describes teachers reaching a plateau of experience and knowledge. For example, knowledge of Piaget's epistemology, the constructivism of Vygotsky, the measuring, assessing and grading of children is something that teachers get to know and use but whose reasoning and power they rarely consider (James et al., 1998). This measuring become a 'regime of truth' (Rabinow, 1984) and is used as a way of normalising student's individual dispositions and ways of behaving. As Rose argues

Psychology has played a key role in establishing the norms of childhood, in providing means for visualizing childhood pathology and normality, in providing vocabularies for speaking about childhood subjectivity and its problems, in inventing technologies of cure and normalisation. (Rose, 1989, p. 134)

When speaking of elementary teachers Alexander (1984) refers to much of their expertise as 'teacher speak' that is often random and serendipitous and which becomes not so much an understanding of children as a definition of childhood. Teacher speak is based upon what Rose (1992) calls the 'psy sciences': heterogeneous knowledges and forms of authority and practical techniques that constitute psychological expertise. Psy sciences he argues, are forms of knowledge that have helped to fabricate (child) subjects through the development of a whole body of expertise, authoritatively exercised through a variety of practices and mechanisms. Through the 'psy sciences' or teacher speak, the child becomes the product of categories, techniques and reasonings through which everyday knowledge is seen as reasonable and natural

(Baker & Heyning, 2004). Baker further argues that these techniques and reasonings are sometimes based on testing and assessment but are primarily informed by teacher knowledge that is gained through everyday experience. The sequential development of students and children, of knowing what stage the child is at, is so embedded within teaching that it has become part of the teacher's taken -for -granted knowledge. The student-centred focus and knowledge creates a sense of authority and legitimacy but is at best, often minimal (Alexander, 1984). In short, while they claim to have expert knowledge of children and of their students and to be concerned principally with their welfare, many teachers knowledge has a flimsy theoretical base.

Recipe Knowledge

Teachers understanding of their work is also sometimes described as 'recipe knowledge (Popkewitz & Brennan, 1998), knowledge with a particular script that has been used often and remains accepted and unquestioned because it has been found to work. Recipe knowledge implies that there is a sense of order specific to the practices and processes of teaching. The recipe includes the boundaries and controls of what it means to be a successful teacher. Straying from the recipe with too much experimentation on the one hand, means that the teacher goes beyond the taken for granted frame and risks losing control, hence jeopardising the organisation of the school or classroom. Recipe knowledge also means that there is no need for the teacher to go looking for confusing meanings or motivations. Theory is seen as unimportant or as considerably less important than a sense of the practical: what works and what doesn't. In short, teachers see their work as being informed by experience rather than theory and they develop a strong sense of themselves as classroom practitioners (Hargreaves, 1984). As one of the teachers at Blessed Family, Mrs. Malinski³ explained her sense of herself as a classroom practitioner:

I see myself as a kind of caretaker, taking care of kids and that the kids are part of the learning process. There should be colour and variety around the room and the kids work hanging up, and it shouldn't be 'doctored' so that if it doesn't have a head it be hung up without a head if it hasn't got one, even though when people looking at work hanging up in your room criticize sometimes. I think I am a much better teacher than I used to be. You learn on the job and you get ideas from other teachers and you learn from them and if something works well then you can do it again and again and if it doesn't work or it's not right, then I say forget it and go on and do something else. You learn from your mistakes and I've learnt as I've gone along and over the years.

In such circumstances professionalism in the classroom is described in terms of technical mastery and hard work while theoretical mastery is often treated by teachers with suspicion (Pollard, 1985). For example, in Jennifer Nias' (1989) study of primary teachers she described teachers who saw their professionalism in terms of reliability, punctuality, efficiency and classroom competence. It was their commitment to hard

work that gave their work meaning energy and purpose, and they did not feel any need to disentangle meanings and motivations and to theorise. At Blessed Family such teachers confirmed their professional commitment by seeing other 'less committed' teachers in the school as a negative reference group, not by engaging these 'others' in any theoretical or philosophical discussion about the theory of teaching, but by looking at the work displayed on the walls of other teachers' classrooms or in the work they saw displayed or discussed. Any discussions about pedagogy tended to be brief during odd moments in corridors or occasionally the staff room, and confirmed the ideas that teachers had about teaching, about what worked and what didn't, and the kinds of teacher and student behaviour that were considered appropriate and what were not. Another sense teachers often have is that of being committed to their students, often as crusaders with a high moral purpose (Nias, 1989). It is also a view that ignores the realities of practice, since teachers try to meet the cognitive, practical and social needs of *all* students in their class.

You can Always Tell Who Is Going to be Gorgeous

One of the features of teachers work in the classroom is concerned with how they understand the children or students in their care through beliefs they have about what the ideal child in their classroom should be like (Clandinin & Connelly, 1995), and as one teacher, Mrs. Kennedy explained her class and practice at Blessed Family that 'you can always tell whose going to be gorgeous'. Teachers defined their students according to their behaviours, actions, attitudes, speech, physical attributes and skills. They never questioned their beliefs about the ideal child against which they measured all students. Rather, teachers confirmed their beliefs and categories in the conversations they had among themselves as they stood during recess and lunch breaks watching the children eat and play. Other confirmations about children were made in simple interactions as they passed through the classroom on the way to the storeroom. Quick, off-the-cuff pointed comments about children could be as powerful as long conversations. Sometimes teachers might just see someone walk in, see a student doing something they considered outside the boundaries, look at each other, roll their eyes or shake their heads in disbelief, disgust or frustration. In these conversational moments they confirmed their beliefs about children, they discussed boundaries they had set or proposed to set, and they confirmed what they thought these boundaries should be and how they varied from one to another. It was a constant process that seemed to endure every day throughout the year; definitions moved and changed but the knowledge underlying it was never questioned. It is just part of the taken for granted world of teaching.

Normal Sorts of Kids

As Mrs. Kennedy at Blessed Family explained when discussing the children at Blessed Family, 'we have fairly normal sorts of kids here', by which she meant middle class and largely Anglo-Australian. This construction of 'normal' and the knowledge that

teachers develop and use in the classroom is done through knowledge that appears universal and applicable to all. Through this use of knowledge norms are established that positions some children as 'other': the child or student who is different or who does not have the characteristics of competencies of other children. Such students are often defined as deficient: not quite the ideal or not mature enough, or not at the right stage of development at the right time. This account of how children fit into a set of characteristics is a system of reasoning that normalises or socialises, and divides individuals. Normalising processes are so much more powerful when they work within the situations of classes and schools, where the actual processes of behaviour or what is classified as flawed or deviant are at worst often minor such as talking at the wrong time, not sitting properly or chewing gum.

Normalising disciplines require deviance but not all kinds of deviance serve disciplinary purpose equally well. Deviance to which few people are prone, for example is of little use, because it cannot serve as justification for regulating more people's behaviour. Only deviance that is relatively widespread and to which almost everyone at some stage of life or under some conditions is believed to be susceptible can justify widespread regulation of private behaviour. (McWhorter, 1999)

In the classroom the process of normalisation creates a space for the child to inhabit, and creates a way for the teacher to speak, think, and act towards the child. The teachers' thinking about the child becomes enclosed in spaces termed 'childhood' or 'adolescence' that seems quite natural, a natural way of describing the situation, but which is actually constructed within a field of power (Popkewitz & Brennan, 1998). It is not just an observation but a valuation and contains not only a judgement about what is desirable, but is also seen as a goal that should be achieved by all students. As James et al (1998) have described it, children are monitored against 'the gold standard' of the normal child. For those who fail to meet the standard, whether in education, bodily development or welfare, the repercussions are strong (James, Jenks, & Prout, 1998; James & Prout, 1990).

In his study of infant schools King found that teachers developed 'typifications' about children. These typifications, he argues, were often taken for granted and unconsidered. Specifically, teachers based their typifications on the idealisations of children they had known in the past, from unquestioned knowledge about students in other situations and places and even what they *imagined* other children to be like in other situations and places. The teachers believed that experience and knowledge of students was important, since what happened in the past may happen again in the future and by basing their knowledge on such experiences they were well prepared. King's theorising is itself an extension of notion of typification, an idealisation that Schutz argued gives meaning to 'the life world'. Schutz based this on W. I. Thomas' conception that 'if men (sic) define situations as real, then they are real, and real in their consequences (Schutz, 1970). Similarly by creating their typification of the ideal child, teachers develop an understanding of their own wisdom of practice. It creates a manageable sense of reality, a sense of themselves as someone 'who knows children', and someone with expertise and authority. It also establishes for them a

sense of themselves within a community of teachers, helping them to make sense and define the reality of their own classroom practice.

Connell argued that the poor and disadvantaged are also seen by teachers in terms of cultural deficit (Connell, 1985; Connell, 1993) since they don't have the social skills or the economic or cultural capital (Bourdieu, 1997, 1993) of the (absent) middle class child. Normal is seen as middle class, even though the later are never identified and are believed to exist elsewhere. What is regarded by teachers is often absent: the unknown that the child or student is measured against is an 'absent 'presence', believed to exist in another place. Despite this absence, and indeed because of it, the normal child is a very powerful force.

Gorgeous Girl, Naughty Boy

Whether the ideal child is male or female is problematic. Clark (1989) argued that teachers consider the ideal student to be female; girls are 'model pupils' whereas boys are seen as a challenge, but at the same time more interesting to teach. Similarly in Bronwyn Davies' study, teachers saw girls as being more diligent and more predictable in their behaviour (Davies, 1982). In a further study, Clarricoates teachers have an imaginary list that readily categorises students in relation to gender. For example girls are 'obedient, tidy, conscientious and orderly', while boys are 'adventurous, energetic and couldn't care less' (Clarricoates, 1989: p. 29; Connolly, 2004). Those children who did not fit into gender patterns were described by teachers as different, odd or even deviant. The teachers at Blessed Family saw gender not as a social construction, but rather that the emergence of gendered behaviours in the primary school is simply proof of the irrevocable laws of biology and part of the whole process that 'boys will be boys'.

Such teacher beliefs about gender and the ideal child are stereotypes or over simplifications about how children will behave. We can see this in how girls are regarded by teachers (and others) as an homogenous category despite their obvious differences. In stereotypical fashion 'females tend to be treated as all alike when the specific cultural and class background of school girls and gender biased, educational and occupational rewards are ignored (Gale & Densmore, 2000). Stereotypes are ways of short-circuiting critical thinking and one of their main characteristics is that 'they provide shorthand ways of discerning meaning... [and] enable meaning to be conveyed quickly' (Gale & Densmore, 2000). How they are popularised is an opaque process informed by 'discourses that form the objects of which they speak ... and in the practice of doing so conceal their own invention (Michel Foucault, 1972). Stereotypes create specific roles and identifiable groups just as the gender stereotypes teachers hold provide identifiable groups and roles in the classroom. While the teacher stereotype of the ideal student who is neat, diligent and obedient may be a girl, it is the adventurous and energetic boy who needs help that provides the real challenge for teachers. Strangely this 'othering' of boys can make the teaching meaningful, providing a rationale for teachers to strive and make the reality of daily life in the classroom interesting. More generally, through this juxtaposition of the 'other' and 'the normal' primary teachers develop an image of the 'ideal child', someone who is seen to exist elsewhere, never in the teacher's own classroom, and against whom other students are measured and mostly found wanting. Through this image of the mythical ideal child, each student's behaviour, attitude, physical size and demeanour, as well as their family and siblings, are measured. The ideal child is normal, reasonable and natural, from a normal, natural family that is of course, middle class. S/he is at the right stage of development for his/her age and developing normally with all the appropriate social skills and is always well behaved.

Professionally Embodied Mothers

Teachers have historically been constructed (and see themselves) as moral guardians, as professionally embodied mothers, whose roles as teachers are an intimate, embodied part of their identity. They see part of their role in the classroom as saving and redeeming children and preventing them from straying from society's mores and standards (Tizard, Moss, & Perry, 1976; Tom, 1984; Widdowson, 1983). One of the dominant discourses within teaching is that of care and the nurture, of the special relationship of the (female) teacher has with the children in her care. It is what Foucault (1979) describes as a form of 'pastoral technology' that takes on a particular form, as the female teacher becomes somehow the professionally embodied mother who is imbued with sentimentality, purity of soul, while caring for the inherently innocent child (De Lissa, 1939; Froebel, 1895). The romanticism of Rousseau and Pestalozzi, and the spiritual philosophy later developed further by Froebel (Blackstone, 1971; Froebel, 1895), and which are still a strong feature of teacher education have had a strong impact on how teachers see their work. Froebel describes the education of the young child as providing an opportunity to express his free inner and divine nature, and the child's play that is so natural and spontaneous that it could be used for pedagogical purposes (Brehony, 2006). It indicates also that young women should view the teaching in religious terms, while the moral guidance of young children is seen as a form of vocation leading to salvation for both the teacher and child (Kelly, 1989). By means of a historically constructed sense of professionalism, teachers build for themselves a contradictory sense of identity where passion is metamorphosed into reason: the teacher becomes the embodiment of professional albeit motherly detachment, so that there is an (unacknowledged) contradiction between the ethics of mothering, care and nurture on the one hand and professional detachment – impartial, disinterested rationality. The weight of classroom problems is laid upon the individual personality, emotional make up and psyche of the teacher (Rousmaniere, Delhi, & Continck-Smith, 1997).

Pastoral power is a means by which order is created through nurture and knowledge, and because it is seen as being in the interests of the student, it is not seen as malicious or aggressive. Derived from the Christian parable of the Good Shepherd, where through nurture and concern, the shepherd cares for his flock and, knowing both the good and evil they do, he establishes links between virtue and control (Rose, 1989 p. 227). In order to exercise this kind of power it is necessary to know what people think and feel, and it implies knowledge of an individual's conscience and how to direct it. Popkewitz (1998, p. 24) describes it as 'the secular culture of redemption' as opposed to the more religious culture and ethic of redemption that prevailed in nineteenth century education (Steedman, 1985) though which such care the child can be saved, since by knowing their students, knowing how they think and feel, care and nurture can shape individuality and assist in the processes of socialisation. In more recent times, the status of the woman teacher is diminished when the teachers of young children are described as 'nice ladies who like children'. The woman teacher's powerlessness is contained within the epithet of 'nice', while 'ladies who like children', implies a kind of nineteenth century philanthropy that relies on female duty and self-abnegation and ignores any intellectual input.

This concept of the professionally embodied mother was exemplified by the teachers at Blessed Family. One of the other teachers, Mrs. Murphy, was concerned with a sense of duty, but at the same time she also had a strong commitment to success for herself and her class, but there was a moral underpinning of doing one's best both for herself and her students. As she explained:

If I say to Jordan, put it away, I know you can do better, and when I think he has done his best, even if he has to do it again and then just accept that...they [children] should be proud of what they have done. I think you should display their best work...they are still developing and they are still working at their own level, but the teacher should make suggestions so that they will get alternative ideas that will help them learn and that they will succeed.

The teachers at Blessed Family worked as a close group even though they had different teaching styles and different teaching philosophies. Mrs. Kennedy, for example was concerned with discipline, control and order; her sense of self was invested in her various roles as wife, mother, and teacher. Although not bought up in the Catholic religion, she converted to Catholicism after nearly 20 years of marriage because her husband and her children were Catholic. Her religiosity, rather than being some kind of spiritual search, was focused on her family and expressed through her teaching. She explained: 'I wanted us to be all together. To be the same. For our whole family to be together and be the same. This was important to me'.

She was deeply upset the day that the independent boy's Catholic school her sons attended rang to say that her youngest son had been truanting. She somehow felt that the fact that he had been playing video games and skateboarding at the local shopping centre instead of being at school was an indictment of her as a mother and reflected badly on her as a teacher. Mrs. Kennedy was similar to the middle class women in Michael Pusey's (2003) *The Experience of Middle Australia*:

These middle class women feel themselves to be enslaved by performance criteria that they can never satisfy. For them the family is a counterfactual standard that sets what they actually do in their busy life against ideal normative standards that give them no relief from the need to perform even better as wives, mothers and daughters. They complain ...that they do not have enough 'time for themselves', and more frequently here, they find themselves divided into

separate performances: wife and love one minute, mother the next, then cheerful and expert employee, then attentive carer.... (Pusey, 2003)

A third teacher, Mrs. Palmer was younger than the others, and by comparison had a more intellectual approach to work in the classroom. Yet there were moments when she wondered if she should be teaching, if there was something else she should be doing - and there were times when she commented that she felt she was simply there to 'mother' children. Some days she mused about her choice of career: she had done well at school and had been accepted at university to study law. Then, due to family influence, she had changed her mind at the last moment and enrolled in teaching. It was an influence that was strongly gendered, for her father, himself a solicitor, had said 'there are enough mad women lawyers' and that, as a girl, she would be 'better off teaching'. Married to a nurse who was a senior manager in a large inner city teaching hospital, she often expressed frustration at what she did during the day, caring for young children. One day as she sat icing biscuits and sticking sweets on them to make faces for a phonics lesson during 'I' week she remarked: 'You know, I may as well have a kid of my own, and I could be home on maternity leave doing this kind of stuff. I often think I should have done law'.

Mrs. Clark who also held a promotion position in the school complemented the other three teachers in her attitude to work in the classroom. She believed that her teaching was a strong part of her commitment to pastoral care and social justice. She was less concerned with order and control, and her classroom never had the sparkle of organisation that was a feature of Mrs. Milanski's or Mrs. Murphy's yet there were never any distressed or crying children in her room and she identified mothering and social justice as an important part of her role. She saw herself as a Catholic teacher rather than as a teacher who happened to be teaching in a Catholic school. Her deep sense of religiosity informed her teaching in the classroom, as revealed by her life history (Plummer, 1983).

I started teaching at a parish school in Woolloomooloo in the inner city, right near Kings Cross, and it was really tough- prostitution, drugs, broken families and poverty. I only ever wanted to work in a Catholic school, but I found this tough, really difficult. I had gone to a Catholic girls' school in the eastern suburbs of Sydney, my brother is a priest and I guess I'd lived a fairly sheltered kind of home life. Anyway once I'd started teaching, I came home from school one day crying, very upset about the school and the families there, and my father said, "Well if you don't like it, leave, but if you stay, give it your best." I stayed and ended up really liking the kids and the school. People, even people you didn't know, looked after you once they got to know you, even if the streets were rough. The locals knew who you were and looked out for you, especially if I was walking up to the bus late at night when it was getting dark. I ended up staying there until I got married and we moved out here to Banksia Hills. It taught me a lot about teaching and making judgments about others. I think teaching is about being concerned about kids. I like that part, of pastoral care. I guess too religion is important to me and an important part of my life.

I Feel Guilty if I Don't Work Hard Enough

At Blessed Family, Mrs. Malinski often remarked that 'she felt guilty if she didn't work hard enough', while at the same time teachers often expressed quite strong emotional reactions to either their students, parents or colleagues. The work of teachers in the classroom is also unique in that it involves intense personal interaction with large numbers of children in the often crowded space of the classroom. What is commonly described as 'classroom atmosphere' involves the moulding and controlling of an effervescent mixture of children who are energetic, spontaneous and largely pre-occupied with their own self interests and feelings. In his seminal work *The Sociology of Teaching* (Waller, 1932), Waller describes teachers and students as being locked into a network of human relationships, and he contended that it was the quality of those relationships that determined the outcomes of education

Teaching involves 'emotional work', a term used by Hochschild (1983) and James (1989), and defined as 'labour involved with dealing with people's feelings, a social process connected to paid work (James, 1989, p. 21). Hochschild (1983) described it as 'feeling the right feeling for the job'. Emotional work and the teachers own feelings and emotions and their interactions with other adults and students are as Barbalet contends: 'a significant part of the constitution of social relationships and processes (Barbalet, 1998)'. There is a belief that is also reinforced within training, that teaching is meant to be a rational rather than emotional process (Zeichner, 1986). Within the literature this belief in professional detachment is also maintained: emotional work remains the absent other, or at best on the margins to be harnessed when necessary for pedagogical purposes. Teaching involves care and nurture and teachers use these to develop order and control through what Foucault describes as 'pastoral power'(Foucault, 1972), a form of power that operates through the unexamined micro processes of everyday life. In the classroom teachers use a form of pastoral power by withdrawing care when they feel it is in the best interests of the child. Among the children at Blessed Family, Mrs. Malinksi was horrified when Jake scratched the face of another child. She demonstrated her horror at what he had done, not just through withdrawal of affection but also by publicly embarrassing and humiliating him and by using controlled anger:

I don't like naughty people. I just don't like them. Especially naughty boys. Do you think I come to school everyday just so that I can look at naughty people. Do you Hmm? Is that what you think? I come to school everyday because it makes me happy to see good people. Nice people. Children who are nice to each other. Nice children who don't pinch and scratch. You can go and sit over there away from everyone- especially me. You can go over and sit there away from everybody else and face the blackboard. That way I won't have to look at your naughty face. Looking at that naughty face just makes me feel so sad.

While this was a powerful moment to witness, Mrs. Malinksi spoke to Jake in this way because she thought that, in terms of safety, he should learn quickly that he should not scratch and pinch. At the same time she gave him a powerful message that she thought his naughtiness was so ingrained that she could see it on his 'naughty face'. As Jake sat facing the blackboard and the tears dripped down his 'naughty face' he showed how painful the public expression of her withdrawal of affection was, as she instructed the class to move away from him too. It was an incident that exhibited the power of the teacher to provide for, or deny children's needs whether physical or emotional, and yet it was an incident that did not disturb the pattern of everyday life in the classroom; rather it was seen as the covert side of care.

Children learn too, that they will be provided with more emotional support and nurture if they comply with the emotional order of the classroom. Children who are 'just gorgeous' are rewarded with more and more affection. Mrs. Kennedy described it this way:

Before you go home all those lovely children sitting there so nicely can blow me a kiss. Oohh! What a big one! I've been blown away! You're all gorgeous! It was so lovely that all those lovely people can go home first.

As part of the construction of social order in the classroom children need to learn to 'play the game' to come to an understanding of the particular moral order of the classroom, and to control their own emotions and conform. After the children had been at school for some time they were described as 'shaping up nicely'. They were shaping into the social order of the classroom, managing their own feelings, and learning to understand the teacher's expectations. Children found that they needed to appeal to the teacher's need to care, but not be so needy that they are seen to 'whinge'. Rachel was a child in Mrs. Palmer's class. When asked why she had been given a 'Special Sticker' she succinctly summed up the secret of her kindergarten success: 'I don't whinge, and I don't go the Sick Bay for every little scratch'.

At the same time, in the way that Foucault describes power as being 'circulatory' students can use emotion to control the teacher. They have a capacity to undermine the teacher's self confidence and self esteem, for they are not passive emotional recipients. As Mayall argued 'children feel themselves to be actors with a part to play in collaboration with adults in constructing the social order' (Mayall, 1998). Being 'cute' is a guaranteed way of eliciting a response, a special technique that children use. By being cute, children can evoke the stereotype of innocence and 'babyish' behaviour by acting in ways that appear submissive. Aaron was younger than the rest of his kindergarten class, physically smaller with pudgy, soft baby features and when he was trying to avoid trouble he would sit passively with his head on the side like a puppy, a picture of innocence. There were times though when it was a strategy that could backfire, and on occasions Mrs. Malinksi would say: 'He's trying to be cute, but its not going to work'.

Ignoring the emotional dimensions of teachers' work becomes a 'technique of the self', a form of governmentality (Burchell, 1996 p. 20), so that should a teacher not be able to manage the emotional dimension of the classroom that makes up a significant part of classroom management, it is a form of personal failure. They are encouraged through their training and through interchanges in the daily life of the school, to act upon him/her self, and so regulate their thoughts and behaviour. These 'techniques of the self' (Foucault, 1978) are negated in a discourse of love, and become at once both

totalising and individuating. While teachers position themselves as carers, it is caring with a sense of scientific detachment, such that their own feelings are ignored or at best controlled – a positioning which becomes integral into the structures and coercions of everyday school life and the work of teachers.

Conclusion

The classroom, the space where teachers spend their working day, is an arena where normalisation and socialisation occurs for both teachers and children. Teachers see their everyday work as being informed by practice rather than theory, and they develop a strong sense of themselves as classroom practitioners. By focusing on a particular social space we can analyse the ways that teachers' work is conceptualised and understood around the notion of wisdom of practice. Rather than theoretical knowledge, teachers' practice is informed by everyday activities, of what works and what doesn't and through the ways that they talk about what it is they do. Part of the recipe knowledge teachers have socialised within them is a belief in the ideal child against whom they compare the children in their classes. This too is a strong form of socialisation because children soon learn where they fit and norms are quickly established that position some children as 'other'. As a largely feminised profession the work of many teachers is also informed through the notion of themselves as professionally embodied mothers, as moral guardians, whose knowledge of teaching and classrooms provides them with a form of pastoral technology that works as a form of normalisation that is used to control both teachers and students. Teaching is also a form of emotional work, where teachers are expected to manage their own feelings and the emotions of children parents and other staff members, and maintaining an emotional order even though emotion is rarely considered in terms of teachers' work. Teachers understand their work as being rational rather than emotional, of having scientific detachment that becomes a 'technique of the self', maintaining the expected social order of the classroom. The classroom is a dynamic workplace, understood through the materiality of practices that occur there and constructed through the work of the teacher.

Biographical Note

Margaret Freund is a lecturer in the Sociology of Education at the University of South Australia. Her particular research area is the ethnography of teachers' work. She has also had many years of experience as a classroom teacher in both public and private schools.

Notes

 Catholic schools make up nearly 22% of all Australian schools. They are classified as 'private' schools, and charge fees, but gain almost all of their funding from Commonwealth and State governments. (Anderson, 1992). They also enrol large numbers of children who are not Catholic, and are gradually becoming the school of choice for the Australian middle class (Freund, 2005).

- 2. Examples of this kind of folk knowledge include statements such as 'they are always wild on windy days', or 'don't smile before Easter'.
- 3. Pseudonym

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TEACHERS AND DEMOCRATIC SCHOOLING

Thomas Kwan-Choi Tse

Introduction: Conceptualisation and Organisation

'The very nature of schooling, both within and outside classrooms or school walls, is political' is a basic fact that should be taken into account in our discussion of citizenship and democratic politics. Under the umbrella term 'democratic school(ing)', it could refer to a number of related notions such as democratic education, equal educational opportunities, democratic or human rights school, democratic leadership, and democratic classroom. These terms point to different components or emphasis of democratic schooling. In brief, democratic schooling refers to at least three dimensions as follows:

- 1. Provision and availability of education, particularly access and fair distribution of resources concerning the ideal of 'education for all' and 'equality of education opportunity' (Gutmann, 1999). Provision of public schooling is a public service or welfare, a pillar of modern democracy and welfare state. Basic education is an important part of modern citizenship it is a social right as well as a condition of good citizenship.
- 2. Democratic school in terms of organization and management. Far beyond merely governance structure and decision-making like voting in formal politics, democracy is also a way of life and occurs in the various realms of social life. Education in democracy implies an idealized structure of organization, ways of governance and participation, as well as making school a democratic learning and working community (Meighan, 2001). It would be realized in terms of shared governance, a widespread inclusion and sharing of perspectives, open discourse, and a pursuit of certain democratic values or ideals. Other corresponding organizational attributes include school culture and environment, leadership and management, staff development, school policy, and partnership with many stakeholders.
- 3. Content and ways of schooling, which could be further divided into formal and informal curriculums. Citizenship education is virtually a basic goal of modern public schooling, and it is deliberately or indirectly taught by formal and informal schooling life. They usually refer to democratic pedagogical practices, as well as learning opportunities inside and outside classrooms for stu-

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dents to learn, for example, school clubs and societies of all kinds, including community service. The teaching of human rights and democracy calls for participatory learning and discussion of controversial issues; and it should go hand in hand with a greater democratization of school life and be supplemented by a wide range of autonomous student and extra-curricula activities (Esquith, 2003; Roker, 1999). For some scholars (Apple & Beane, 1995), the vision of democratic school is also beyond the progressive, humanistic and child-centred orientation. With an eye on the larger social conditions outside schools, particularly issues concerning justice and inequalities such as poverty, sexism, and racism, students should be educated as critical readers of their society, and meaning-makers of their lives. And at best, they should seek change or be engaged in social reconstruction.

These conceptual distinctions are initially used for analytical purposes. In reality, we should view democratic schooling as a single, interconnecting whole at work at system, organization, and classroom levels, rather than as a collection of individual isolated elements. Given the comprehensive coverage of democratic schooling, it is beyond a relatively brief single entry to discuss these elements fully. Also, some elements are discussed by other entries in this Handbook. Therefore, to avoid repetition, this chapter will focus on the dimension of school organization (the second dimension), that is, the notion of democratic or human rights school. But even so, readers will easily find that it may be closely related to other aspects of democratic schooling or teachers as discussed elsewhere in the Handbook.

Whilst the democratic potential of school has been recognized by many scholars and practitioners, the normative and exact roles of teachers in democratic school have remained controversial issues for years. Teachers play crucial and multiple roles in attaining democratic schooling and furthering citizenship education – either as a citizen, a staff member, or a facilitator of learning. Democratic school(ing) provokes debates, and stimulates interest and efforts in the development of democratic practices at all levels of schooling for teachers and students. After this brief discussion of the three dimensions of democratic schooling, the following sections will analyze its relevance to teachers in the public school system. Topics of discussion include: (1) the significance and components underlying democratic school; (2) the application of democratic principles to schooling practices, and the benefits derived from those practices; (3) the difficulties of school democratization and their causes; and (4) the prospects of democratization and the roles of teachers.

The Significance and Justifications of Democratic Schooling

Democracy and education are integrally linked and indispensable to each other. There is a two-way traffic between good democracy and good education as an educated citizenry is conducive to democracy, and correspondingly, democracy breeds healthy schools. The Functioning of democracy requires a well-informed and competent citizenry to make decisions and to live an associated life. The phrase 'education of democracy, in democracy and for democracy' respectively refers to the contents, ways and purposes of education with respect to democracy. Many educators and philosophers argue for a democratic education and the ideas of democratic school (Kelly, 1995). They believe that a democratic society requires education that is compatible with democracy. They also believe that democratic education is premised on a democratic school. For example, for John Dewey (1916), democracy is more than a form of government and a political ideology; it is primarily a way of life as well as a way of education.

Apart from formal government, democracy should also happen at the level of everyday life in other collectives such as schools, workplaces, religious groups, voluntary organizations and the like, because it is recognized that the realm of civil society and civic culture is supportive of the proper functioning of formal democracy. There is a shift of emphasis from representation and election to direct participation and deliberation. Some forms of participatory democracy are desirable in achieving a more mature and prosperous public life. 'Workplace democracy' is deemed as important as 'parliamentary democracy' as the former could maximize the opportunities of participation and empowerment, as well as work towards a transformation of social conditions. An emphasis on flattening of organization, improved communication, devolution of and participation in decision making, and power sharing is also echoed by modern management theory (Hoy & Tarter, 1993). Naturally the most effective way of achieving democracy is to immerse individuals in a democratic form of social life. Democracies serve individuals as well as groups because of the interdependent and interactive relationships between selves and communities. Engaging individuals with a direct experience of democracy and as an integral part of their schooling is supported by three compelling reasons (Mosher, Kenny, & Garrod, 1994). First, democratic education is a powerful stimulus for full human development, including cognitive, social, moral, and political domains. Second, democratic school governance offers the most practical and effective means of improving the school's moral culture that shapes the actions of their members. Third, with first-hand experience of self-governance, students could better understand and value democracy and develop the political competencies required for effective democratic citizenship. As such, democratic schools could teach the participants how they might transform their society.

Besides the benefits stated above, a democratic school is also justified with its intrinsic ethical values such as basic human rights, equality and participation (Keith, 1996). In short, democracy is a significant goal for schooling in its own right. In part because of Dewey's enormous influence, many contemporary educators and scholars promote similar democratic visions of education – in the canons such as human rights, empowerment, social justice, respect for diversity – with the hopes for building a more caring and humanistic school or society.

Against these backgrounds, a quest for democratic schools or democracy of schools has been pursued over the years. Some famous examples are Summerhill and a number of free schools, which possess essential qualities of democratic and caring communities (Richmond, 1973).

Like every organization, the school could be viewed as a political arena in which students and staff are potential political actors. The school site is full of politics with prevalent political phenomena like political influence, resources distribution, ideology, decision-making, leadership, participation, and communication. And many education or school policies are fundamentally political decisions. Issues of ownership and use of power is at the centre of the notion of democracy. Politics is widespread in schools and a power relationship can be calculative, manipulative, and negative, but it could also be collegial, empowering, and positive. Empirical works have proliferated in the academic and professional literature over the years, which show that school leadership is closely related to teachers' satisfaction and morale, professionalism and autonomy, collegiality and school culture (Blase & Anderson, 1995). Different forms of principal leadership also influence teachers' relations with other colleagues, students and parents, and result in considerable differences in school climate. Variations in leadership also lead to variations in teachers' political orientations. Some cases suggest that facilitative principal leadership would increase teachers' involvement in decision-making, and efficacy.

Introducing a participatory governance structure is thus important in creating democratic places of working and learning. We could easily dismiss authoritarian leadership or management as both unethical and ineffective and envision a democratic form as an attractive alternative. The new notion of 'democratic leadership' represents a shift of emphasis from management to empowerment (Blase & Anderson, 1995). This is a direct challenge to traditional rational models in the fields of educational administration and management. Schools should strive to embody principles of democracy for their members as part of a sound education because of the similarity of the values underlying both democracy and education. Accordingly, there are a number of democratic requirements for schools (Davies, 1999; Fletcher, Colin, & Williams, 1985; Levin, 1998).

The central tenet of a democratic school, of course, is about power sharing among stakeholders – be they administrators, teachers, parents, or students. It also thus requires a re-examination of teachers' relationships with other stakeholders. In short, school governance is one area in which citizenship and democracy can be realized in public schools. Recognition of the rights and responsibilities of teachers and students in school governance is somehow a form of 'active citizenship'. Many believe that more power and autonomy should be delegated to individual schools so that front-line educators could tailor programs to the vision and needs of their schools – with school-based or site-based management as a way of decentralization of decision-making over the budgeting, personnel, and curricula matters from a central authority to individual schools.

Similarly, schools could enhance students' civic competence by their provision of autonomous students' organizations and extra-curricular activities. Students should be provided with direct experiences in self-governance, which are prototypes of their real formal political lives; and be encouraged to organize school functions and students' activities. The presence of a student association or similar body is a key indicator of a democratic school. Student governing bodies are set up to teach the students the values of self-government and to familiarize them with the forms and procedures of political institutions they will face in their adult lives. As a way of communication between teachers and students, these bodies could create a sense of belonging among students, and give students some responsibilities and experiences in managing themselves, especially for the office-holders.

With regard to empirical evidence, democratic schools have proven to be effective in rule-making, improved communications and mutual trust; better team work, cooperation

and support among members; a greater sense of responsibility and morale; better decision-making; and a greater empowerment of teachers (Dworkin, Saha, & Hill, 2003; Harber, 1992; Hepburn 1983; Rice & Schneider, 1994; Spicer, 1995).

Besides that, an open and democratic school or classroom climate could foster students' civic skills and positive political orientation such as political interests, knowledge and efficacy, even at an early age (Angell, 1991; Dobozy, 2007; Ehman, 1980; Harber, 1992; Harwood, 1992; John & Osborn 1992; Perliger, Canetti-Nisim, & Pedahzur, 2006; Vieno, Perkins, Smith, & Santinello, 2005). Students with positive attitudes are found in participative schools, showing that students need to share in the responsibilities and activities of an institution in order to establish important political attitudes which will support active citizenship (Cuccia, 1981; Gray & Chanoff, 1986).

The Dearth and Difficulties of Democratic Schooling

Despite being justified on both educational and normative grounds, as well as the empirical evidence of the benefits yielded, the view of school as a seedbed of democracy was in doubt when seen against the reality. Mainstream educational systems are predominantly authoritarian and bureaucratic with regard to both teachers and students. Many conventional schools are still organized along bureaucratic-authoritarian lines, both at the levels of structure and at the level of classroom learning, where teachers and students share little actual power in their schools. Teachers actually have more participation in the technical-operational domain concerning specific means or tasks than in the managerial-strategic domain concerning overall goals and policies, and they feel most deprived of decision-making in the latter domain (Conley, 1991). Also, there are significant imbalances in the management levels, as indicated by the male dominance in a feminized teaching labour force. Many schools are characterized with leaderships which are either authoritarian, closed, pseudo-participative or superficially in character, lacking the collaborative, democratic and inclusive elements. Undemocratic schooling is often the result of negative leadership exercised by the management. Literature also has confirmed the predominance of controloriented principalship and its adverse political effects on teachers (Anderson, 1998; Blase, 1997). Many principals wield considerable political power over teachers and students, and teachers and students' positions are very vulnerable to malpractices. In many cases principals of closed and manipulative styles could drastically limit teachers' autonomy and participation, with many subtle forms of control at work which could weaken the political efficacy of teachers. Violating the rights and professional norms of teachers also results in teachers' alienation and disaffection. Sadly, truly empowering, democratic and facilitative forms of leadership are still rare, if not unfound. And the task of creating and managing a democratic school is fraught with frustrations and limitations.

Therefore, we should be aware of the constraints on the practitioners when implementing democracy. The institutional form of public schools and the distribution of power within them in many countries obstruct the implementation of democratic principles in classrooms or schools. And the progress is constrained by the traditional, conservative and subordinate political role of teachers in school, which undermines the potential of democracy or collective governance. Ironically, teachers tend to act conservatively towards parents and students, in terms of power-sharing (Dworkin et al., 2003). There are many potential conflicts between teachers and parents or students. School democratization means both opportunities and threat to the teachers as it directly influences teachers' working conditions. On the one hand, teachers might enjoy a higher degree of autonomy from a bureaucratic and autocratic management. On the other, teachers are concerned with their authority and might not welcome the interference from parents, students or community representatives. And at worse, teacher–parent conflict or teacher–student enmity may also be intensified when parents and students have a share in school governance.

Concerning the part of students, despite the advocacy by many educators, most ordinary schools fall short of popular expectations of democratic schooling. Indeed, the nature of citizenship education activities held in schools are more concerned with moral and social education, or community service than showing direct relevance to politics. Much of the so-called 'citizenship education' in the schools does not teach students about democratic education, but trains them to regard the rules and standards of conduct of the school. Also, students are living in a custodial and undemocratic environment characterized by practices of tracking, rigid and hierarchical roles and rules, disciplinary system, school rules and practices of conduct assessment, as well as hierarchical control and restrictions over students' autonomy. With an emphasis on compliance to rules, authorities and discipline, schools underemphasize the rights and power of students in school governance. These daily encounters and patterns of school authority and unequal power structure serve to reinforce dominant ideologies and the status-quo.

Contrary to the ideal of a democratic school, many conventional schools are in fact characterized by hierarchy, concentration of power, and a strong emphasis on control, discipline and supervision, which are in the interests of administrative convenience but in violation of human rights. The political environment in schools also detaches the students from the daily operation of school policies and affairs. Students have little or do not share any real power in their schools and students' involvement in school policies and affairs is low. Student self-governance is undermined by paternalistic management towards students and the channels for students in school governance are rather limited and underachieved. Very few student organizations could provide students with real and substantial power in shaping their school lives which results in depriving the students the opportunity to share in decision-making and self-governance.

Another significant challenge from democratic schooling is teacher-teacher relations themselves. While collaboration is very appealing, it is also demanding and a new thing to many teachers inhibiting in the culture of individualism and classroom autonomy (Hargreaves, 1994). In practice, collective action is still a rare option among teachers. At worst, new collaborative or collegiate working relationships fostered by new school management or curriculum reforms would become merely a pseudo-democratic stance.

So far I have highlighted how democratic education is undermined by the authoritarian school and classroom climates where self-governance of teachers and students is not realized. There are a number of reasons for this failure. Part of the problem is teachers themselves as mentioned above. And other causes lie at both institutional and organizational levels.

At the institutional level, public schools are caught between the two contradictory imperatives of capitalism and democracy (Bowles & Gintis, 1976; Carnoy & Levin, 1985). Merely paying lip service, many governments do not maximize democratic power, and the provision of democratic education has not been the major objective of the public schools in many places. By contrast, working in an inherently anti-democratic fashion, many education systems tend towards socializing and sorting students to be workers and consumers. Some radicals argue that the primary goal of current public schools in the United States is the provision of workers in the economic system (Spring, 1996). Besides the fact that equality of opportunity through schooling has never been achieved, equality of opportunity has nothing to do with equality of power. Instead, the public school becomes an instrument of political power over the citizens.

These problems have become more severe in an era of neo-liberalism and a dominance of corporate culture. Education policy in many places is currently driven by economic and technocratic considerations, and by a mechanistic conception of school effectiveness, which omits many important values in the moral and political realms. Some crucial challenges arise in the form of policy initiatives such as school vouchers, charter schools, and parents' rights movements. Other attempts to regulate schools such as outcome-based education and standardized testing also hamper a more autonomous form of education and the democratic polity.

In fact, nowadays many places embrace two opposed policy strategies of school management simultaneously: centralization and bureaucratization on the one hand, and deregulation, delegation and democratization on the other. To a certain extent, a civic-democratic discourse has given way to the language of commercialization, commodification, marketization and privatization. And within the dominant discourse of corporate culture, citizenship is portrayed as an utterly privatized affair that produces self-interested individuals. A pursuit of corporate culture and an emphasis on the workings of market principles also ignore social injustices in the existing social order and downplay or sacrifice the democratic ideal and practices of civil society. The danger is that economic or efficacy concerns might override social ideals such as addressing social deprivation, inequalities, injustice or children with special needs.

Concerning school democratization, the conflicts between market principles and social ideals have been sharpened by recent reforms which intensify the tension within the governing bodies (Deem, Brehony, & Heath, 1995). Although reform of school governance is vital for democratic schools, the potential is in fact undermined with a new partnership model between parents and teachers characterized by managerialism and consumerism which treat parents or students as clients; an enterprise culture of neo-Taylorist style of management akin to private business; an ethnos of control and accountability; mentality of value for money and ill-defined notions of excellence and quality (Anderson, 1998; Blase, 1997). There are also contradictions between the claims of distributed leadership in the discourse of education management theorists and the actual practices (Adams & Waghid, 2005; Hatcher, 2005; Smyth, 1993).

A corporate style of management and concerns with product or services delivery undermine or counteract the efforts of humanization and democratization. The facts that most teachers being state employees and the occupation of teaching under heavy state control mean that the room of professionalization and democratization is rather limited. Teacher unionism is disfavoured by the government, and teachers are usually excluded from central decision-making concerning educational matters. There is little evidence that educational or democratic values shape governance activity as conceptions of good governance among school governors are dominated by concerns about effectiveness and efficiency of task completion (Robinson & Ward, 2005).

At the organizational level, the provision of democratic experience to students is proved to be problematic in a number of studies (Merelman, 1980). Among many factors contributory to the failure of democratic schooling, the ultimate organizational constraints originate from the particularistic characteristics of school simultaneously as a custodial organization and teaching institute (Tse, 2000). Since the school processes varied goals which are pragmatically contradictory, the basic structure of conventional school organization is based upon the principles of seniority and hierarchy and maintenance of authority, which is immanently against the principles of democracy and equality (Magendzo, 1994). Consequently, there are recurring tensions between authority and discipline, on the one hand, and equality and democracy, on the other. An overriding concern with order maintenance, moral training and instruction often leads to the crowding out or a removal of democratic values. No wonder that democratic education is secondary to moral education or reduced to teaching of formal political topics; and the scope of democratic participation in schooling is circumscribed by administrative considerations. The a-democratic and even undemocratic school organizational structure limits the space of students' participation and democratic request and offsets the work of democratic education in the formal curriculum, if any. Because of the complexity of macro, meso and micro politics of schooling, we have to be cautious about the gap between rhetoric and reality.

The Prospects of Democratic Schooling and the Roles of Teachers

As shown above, the mission of public schooling in creating an informed citizenry in modern democracy is constrained by the double trend of domestication by government and market competition where education policy is increasingly coupled with economic considerations rather than ethical concerns. Although the gap is wide, democratic school reform is urgent and feasible for the revitalization of public schools and the furthering of democracy, against the currents which celebrate economic rationalism.

It is clear that instead of easy promises or principles on paper, democracy in practice involves tensions, conflicts, controversies and contradictions, and often struggles on the way to its realization. Indeed, many case studies (Trafford, 1993) show that school democratization is often a daunting task. And they are unusually few as strengthening students' and teachers' participation costs much time and effort. Adopting these measures would cause schools troubles. We could anticipate challenges such as bureaucratic intransigence and an obsession with administrative tasks; financial cuts; community pressures from others and demands placed on school to serve business needs; conservatism and cynicism towards creative curriculums and programs; despair and exhaustion due to engagement and participation; and many daily obstacles resulting from reform, to name just a few (Apple & Beane, 1995).

While the task is difficult, there needs to be much more studies into the democratization of schools on a worldwide basis and in light of these results, we need practical guidance on how to make it happen rather than on what should happen (Davies, 2002). Fortunately, there are rich and vital democratic schooling experiences around the world, even on a small scale, with encouraging or beneficial results even in extremely depressing and difficult circumstances (Apple & Beane, 1995; Cate, Vaughn, & O' Hair, 2005; Harber, 1995; Harber & Davies, 1997; Jensen & Walker, 1989; Mosher, Kenny, & Garrod, 1994; Osler, 2000). We could highlight a number of valuable lessons based on these experiences (Harber, 2000): an examination of basic values; overt and careful planning for change; an involvement of the whole school community; setting new roles and responsibilities in participation; a need to improve the communication and exchange of information among the stakeholders; greater discussion and deliberation; a restructured curriculum with real-life problems and issues, and re-establishing the connection of knowledge to students' concerns.

Of course, democratic schooling is not possible without corresponding reforms at school and institutional levels. And these impending issues are to be put on the agenda for further discussion and debates. Democratic education involves learning of democracy, schools as democracies, as well as schooling for democracy. Accordingly, reform of democratic schooling is a comprehensive one, and educators must set a focus on education for democracy as their highest priority. For democratic school reform to be successful and sustainable, corresponding curricular, pedagogical, and structural changes should be made and it therefore calls for greater collaboration and cooperation among communities, school and university faculties, and administrators in the form of democratic decision-making and shared responsibility. And education for democracy should be a top priority in both initial and in-service teacher education, an important professional socialization process where teachers encounter and build up their knowledge, beliefs, commitment, and capacity with regard to democracy and democratic education (Torney-Purta, Richardson, & Barber, 2005). In terms of professionalism, teachers' civic responsibility - educating future citizens for engagement beyond the private classroom to the public sphere - is vital to a broader 'civic professionalism' required of the teaching profession (Kennedy, 2005).

As can be seen from the above, the role of teachers, the progress of democratic schooling, and the education effects of schooling are highly variable, dependent on many contextual, institutional and organizational factors. The picture of reality is mixed with disappointment and delight as teachers are problems in most cases but also the solution in certain cases. Teachers are victims of conventional undemocratic schooling as well as catalysts for democratic schooling. The double contradictory positions of teachers as both victims and collaborators of undemocratic
schooling also mean a major blockage to teacher and student empowerment. To break the vicious circle and to make real changes happen, teachers should see through their situations and join together for collective action. I believe that teachers are not alone in this endeavour.

Biographical Note

Thomas Kwan-Choi Tse is currently an associate professor of the Department of Educational Administration and Policy, CUHK. He teaches and publishes in the fields of citizenship education, moral education, educational policy, and sociology of education. His current research focuses on civic education in Chinese societies as well as recent education reforms in Hong Kong. His works on citizenship education appear in such journals as *Educational Practice and Theory, International Journal of Education Development, Pedagogy, Culture and Society, Discourse*, and *International Studies in Sociology of Education*; and in the books like *International Handbook of Educational Research in the Asia-Pacific Region, Education and Society in Hong Kong and Macau (2nd ed.), Remaking Citizenship in Hong Kong, and Values Education for Citizens in the New Century.*

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TEACHERS AND PARENTS

Mavis G. Sanders

The Teacher–Parent Relationship

In 1998, Joyce Epstein and I co-edited a special edition of *Childhood Education*, entitled "International Perspectives of School, Family, and Community Partnerships" (Sanders & Epstein, 1998). The research articles included in the edition represented 11 nations and demonstrated the importance of partnerships in educational reform and excellence. In addition, these articles highlighted how essential the teacher–parent relationship is for positive and productive home–school connections, and how critical teachers are in establishing and maintaining this relationship. In this light, Stelios Georgiou (1998) of Cypress wrote:

Neither teachers nor parents understand each other's needs, attitudes and intentions concerning home-school relations. A dialogue needs to be established to improve communication. The initiation and the success of home-school partnerships depend mostly on teachers... The parents cry out to the school for help and cooperation, but unless the teachers make an effort ... this cry will not be heard. (p. 366)

Tens years later, family involvement remains a topic in international dialogues about education and educational reform (Hiatt-Michael, 2005). Moreover, research conducted over the last two decades, suggests that with training, educators can gain the professional capacity to not only listen to parents but also to partner with them in the education of their children (Epstein, 2001).

In this chapter, I, first, discuss the role of teachers in comprehensive school, family, and community partnerships. Second, I describe the importance of and challenges inhered in the teacher–parent¹ relationship. Third, I consider the role of teachers as border crossers in their efforts to develop relationships with the parents of increasingly diverse student populations. In the final section, I discuss the role of professional development and school-based support in building teachers' capacity to cross literacy, poverty, and racial and ethnic borders in order to create more equitable and inclusive learning environments for children and youth.

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Teachers and School, Family, and Community Partnerships

School, family, and community partnerships is a reform strategy that promotes collaboration among families, communities, and educators to facilitate student success. When families, schools, and communities work collaboratively, the following outcomes have been documented:

- 1. Higher student achievement;
- 2. Improved student behavior and attendance;
- 3. More positive school climates. (Henderson & Mapp, 2002)

Effective partnerships require that schools view parents and communities not simply as customers or clients but as partners in the educational process. This paradigm shift must occur at the school-level as well as among key stakeholders at the individual level. Epstein (2001) captures the importance of both in her theory of overlapping spheres of influence. The external model of the theory shows three spheres representing the home, school, and community. These spheres can be pulled together or apart by factors such as the age of the child, the educational background of the parent, or the professional experiences of the teacher. When these spheres are pulled together, students benefit from the collaborative support provided by adults in their families, schools and communities. However, when these spheres are pulled apart, students are placed at greater risk for negative school outcomes. For successful overlap to occur, schools must create systemic structures and channels of communication that promote and sustain collaborative action. Epstein provides a framework of six types of involvement to help schools organize such action around important goals for students' learning.

The six types of involvement in Epstein's framework (Epstein et al., 2002) are:

- 1. Parenting helping all families to understand child and adolescent development and to establish home environments that support children as students;
- 2. Communicating designing and conducting effective two-way communications about school programs and children's progress;
- 3. Volunteering recruiting and organizing help and support for school programs and student activities;
- 4. Learning at home providing information and ideas to families about how to help students at home with homework and curricular-related decisions and activities;
- 5. Decision-making including parents in school decisions and developing parent leaders;
- 6. Collaborating with the community identifying and integrating resources and services from the community to strengthen and support schools, students, and their families.

When schools integrate activities that encompass these six types of involvement in their educational programs, they also create opportunities for meaningful interaction among individuals in students' schools, families, and communities.

Teachers play a key role in the success of partnerships. At the school level, their involvement and leadership in the planning of such partnerships are critical. As shown

in the internal model of Epstein's theory (see Epstein & Sanders, 2002), individual interactions between teachers and parents constitute important areas of overlap, and also are essential to students' school success.

The Teacher–Parent Relationship

Research shows that teacher training and quality, expectations of and relationships with students, and collaboration with students' families significantly influence the schooling outcomes of children and adolescents. Parents have been described as children's first teachers. The content and quality of learning that occurs at home influences how well children are prepared for formal schooling. Once formal schooling begins, teachers depend on parents to support children's learning at home by assisting or monitoring the completion of homework or by reinforcing teachers' standards for academic and social behaviors. Parents rely on teachers to create nurturing classroom environments; to provide their children with rich and varied learning opportunities; and to communicate their children's challenges and successes in a timely manner. Through children and youth, then, parents and teachers are inextricably linked in a relationship replete with requirements and expectations for collaboration, as well as legitimate areas and reasons for conflict.

Conflict between teachers and parents stems from their different roles and responsibilities. Parents are focused on and likely to advocate for what is best for *their* children, not necessarily for what is best for *all* children within a classroom, grade-level, or school. Teachers, on the other hand, are responsible for identifying practices and making decisions that benefit the larger population of students, not just one child. Conflicts that result from this tension are natural and can be managed within the context of a healthy and respectful relationship with appropriate and clearly defined limits and responsibilities for both teachers and parents (Lawrence-Lightfoot, 1978, 2002).

However, conflicts between teachers and parents also can be dysfunctional. In *Worlds Apart*, Lawrence-Lightfoot (1978) described dysfunctional teacher–parent relationships in the following way:

Discontinuities between families and schools become dysfunctional when they reflect differences in power and status ... Creative conflict can only exist when there is a balance of power and responsibility between family and school, not when the family's role is negated or diminished. (pp. 41–42)

Dysfunctional conflict, often a result of institutional or individual perspectives and actions that fall outside a framework of partnerships, dominates the literature on parent-teacher relationships. Nearly 25 years after her pioneering work, Sarah Lawrence-Lightfoot (2003) observed:

Everyone believes that parents and teachers should be allies and partners. After all, they are both engaged in the important and precious work of raising, guiding, and teaching our children. But more often than not, parents and teachers feel estranged from and suspicious of each other. Their relationship tends to be competitive and adversarial rather than collaborative and empathic. Their encounters feel embattled rather than peaceful and productive. This relational enmity...reflects a territorial warfare, a clash of cultures between the two primary arenas of acculturation in our society. (p. xxi)

The difficulty of the teacher-parent relationship is more pronounced when teachers and families do not share a common set of beliefs about the role of schools, families, and teachers in the education and socialization of children, common cultural or socioeconomic backgrounds, common educational or personal experiences, or a common language with which to discuss such issues. Student diversity, then, while potentially an asset in the classroom, may increase the difficulty of the teacher-parent relationship. Yet, student diversity in classrooms in many nations is likely to increase over the next decade.

In 2004, the United Nations Department of Economic and Social Affairs (UNDEC) issued a report stating:

Today, more people are residing outside their country of birth than ever before, and since the underlying causes of such mobility are likely to continue, international migration will remain an important component of both demographic change and future globalization. (p. 83)

This trend has created more diverse nations and more diverse schools. In industrialized nations, increased diversity has resulted from net immigration; while in some non-industrialized nations, diversity has increased due to refugee flows (UNDEC, 2004). Thus, in many classrooms across the nations, teachers have increasingly different backgrounds than their students and families. This means that teachers not only have to adapt curriculum and pedagogy to foster students' academic success (Nieto, 1998, 2002), but also their interactions with students' families. A growing body of research suggests that to successfully do so, teachers must act as border crossers – individuals who have the skills, knowledge and dispositions to cross racial, ethnic, and income differences in order to build relationships that support their professional goals and responsibilities.

Border Crossing

Teachers are more successful in educating children when they involve their families. Parental involvement allows parents to understand school and classroom activities and better support these efforts. Parental involvement also affords teachers the opportunity to better understand the cultures, needs, and experiences of their students. Reaching out to the families of all students increasingly requires teachers to reach across borders that can separate children and families from the life of schools. Depending on the context, teachers may have to cross literacy, poverty, and racial and ethnic borders in order to be most effective in the classroom. Many times characteristics of literacy, poverty, and racial and ethnic diversity coexist. It is, therefore, also important for teachers to understand how these factors can interact to impact how children and families are perceived by the larger society, and the learning opportunities they are provided.

Crossing Literacy Borders

About 20% of world's population aged fifteen and above is illiterate and about 115.4 million school-age children are not in school (UNESCO, 2002). Moreover, one impact of increasing migration is that millions of other adults are not literate in the language(s) of the nations where they reside. Illiteracy is a significant barrier to full integration into the larger society, and also can be a barrier to effective teacher–parent interaction. When teachers fail to cross literacy borders to engage families in students' learning, the possibility of intergenerational illiteracy and the associated negative social and economic consequences increase (Cooter, 2006). Yet, when teachers cross literacy borders, they can help to break the cycle of illiteracy, improve student academic outcomes, and improve home–school relationships as well.

Researchers and practitioners have documented several strategies that teachers can employ to cross literacy borders. I describe three such strategies below.

Use a Variety of Communication Strategies

Many teachers and schools rely on written forms of home-school communication. However, a reliance on written communication places illiterate and low-literacy families at a disadvantage. Teachers, then, should explore other means of communication to establish relationships and communicate with these families. Home visits, for example, have been shown to be extremely effective (Meyer & Mann, 2006). Such visits provide teachers with opportunities to better understand their students' homes and communities, as well as to express a sincere concern for students and families. Teachers also can use parent-teacher or parent-teacher-student conferences, and when possible, phone conversations, in order to reach out to families and share information about children's learning and progress. When it is necessary to use written forms of communication, teachers should ensure that the language used is accessible to as broad an audience as possible.

Employ Translators

Translators can help teachers communicate more effectively with parents who do not share a common language with the school. While this is possible and prevalent in some contexts, in others, it is very difficult to find appropriate translators. In such cases, teachers should consider encouraging students competent in the school and home languages to serve as translators, although perhaps not for their own families given the potentially negative impact on parent-child relations. Teachers can support and guide students in this bridging role, and in so doing, highlight the centrality of students in the overlapping spheres of school, home and community.

Connect Parents to Literacy Opportunities in Their Local Communities

In addition to students serving as a bridge between the school and home, teachers can act as a bridge between the home and the community. Specifically, several nations from Nigeria to Australia have community-based literacy initiatives (Manjari, 2003).

By being aware of such opportunities, and connecting illiterate and low-literacy families to them, teachers can help families to gain the skills and sense of efficacy that have been linked to increased parent involvement (Hoover-Dempsey, Walker, & Sandler, 2005). Community-based organizations can, thus, become vital partners in the education of children and adolescents (Sanders, 2005; Sanders & Campbell, 2007).

Crossing Poverty Borders

Statistics suggest that half the world – nearly 3 billion people – live on less than US \$2 a day (Shah, 2006). Within the United States and other developed nations, the poverty rate is increasing; at special risk, are families with children. In a comparison of child poverty in 23 of the world's richest countries, Adamson, Micklewright, and Wright (in Shah, 2006) found child poverty rates to range from under 3% to more than 25% and that, on average, approximately one in six children live in poverty.

Research has consistently shown that poor families are less involved in their children's education than more affluent families. Several factors account for these differences. Poor families have less time and fewer economic and educational resources, which limit their involvement. Also, poor families may not know how to be involved, or may view their involvement as inconsequential or unwanted. Schools also influence the involvement of poor families in their children's schooling. If schools do not value the funds of knowledge that all families possess (Moll, Amanti, Neff, & Gonzalez, 1992), then they may discount or diminish the involvement of poor families. The resulting gulf between home and school limits the transformative impact that education can have for poor families and communities, as well as the larger society.

There is a high degree of consensus among teacher-educators that to successfully cross borders of poverty, teachers must first reflect on their beliefs and practices that might alienate the families of poor students. Some teachers believe that the parents of poor students are less caring and less interested in and supportive of their children's education (Delgado-Gaitan, 2004). For example, a teacher in a low-income community in Chile described her attitude toward parents prior to participation in a teacher–parent intervention program, *Educando Juntos*. She observed: "[Before the program] ... I always mistrusted parents. I thought that they don't trust or care for the school system" (Filp, 1998, p. 349).

Such attitudes can lead to a vicious and unproductive cycle. Epstein (2001) found that "If teachers believe that parents are not interested in becoming involved in their children's schooling, teachers make fewer efforts to contact, inform, and work with them ..." (p. 145). This, in turn, may lead to lower levels of involvement among these families that confirm the negative beliefs of educators.

However, interventions in several nations suggest that when teachers have the opportunity to reflect on these beliefs and assumptions and to work directly with poor families, these biases are challenged. Once such biases are challenged, teachers are better positioned to adjust their parent outreach practices to be more open and accommodating to all families (see de la Piedra, Munter, & Giron, 2006). An evaluation of *Educando Juntos*, for example, found that teachers' attitudes and interactions

with poor families significantly improved after they had the opportunity to work directly with them. When teachers cross poverty borders within the context of partnership schools, poor students are helped to negotiate and maximize the educational process, and families are assisted in meeting the physical, emotional, and educational needs of their children (Epstein, 2001).

Crossing Racial and Ethnic Borders

In 1998, Nieto wrote: "Although the concept of race as a biological trait that determines behavior and intelligence has been largely abandoned, the existence and persistence of racism as both institutional practices and personal bias ... cannot be denied (p. 420)." Also of increasing concern is the incidence of inter-ethnic tensions. In nations throughout the world, acts of ethnic violence and genocide continue to place millions of lives in jeopardy. While schools can be used as tools of ethnic conflict and repression, they also can become arenas where racial and ethnic differences and commonalities are explored and where acceptance of difference is modeled and encouraged (Henze, 2000). A UNICEF report edited by Bush and Saltarelli (2000) contended:

...[F]ormal schooling and training as well as non-formal education can play an essential role in conflict transformation, whether to sensitize a society to inequities in a system; to foster tolerance and inter-group understanding; to promote healing and reconciliation; or to nurture the idea and capacities for peace. (p. 3)

Teachers, then, can be professionals on the frontline of social transformation. In this role, teachers, through their leadership styles, tasks, and reward structures can promote or discourage inter-ethnic interaction and cooperation among students in their classrooms (Plank, 2000). Similarly, teachers can promote or discourage ethnic and racial acceptance and tolerance through their interaction with students' families. When teachers take proactive steps to cross racial and ethnic borders to build strong ties with diverse students' families, they increase the likelihood of creating inclusive classrooms where all students' cultures are valued, and where all families are helped to contribute to their children's school success.

When teachers are prepared to understand the beliefs and values of diverse cultural groups; how these beliefs and values may conflict or correspond with the values and beliefs of the school; as well as structural barriers that may limit parent involvement among diverse groups, then they are better able to account for these differences in their classroom and family outreach practices (Weiss, Kreider, Lopez, & Chatman, 2005).

For example, teachers who believe that families, regardless of racial or ethnic background, want what is best for their children can engage in conversations with families to explore how they currently support their children's learning. Such conversations allow families, teachers, and students to understand the contribution of each to the child's school success. These conversations also can result in strategies to expand, modify or refine families' practices to better align with the school's goals for students' learning, or to better address the needs of the individual child. Equitable and democratic schools and classrooms that can promote tolerance of cultural diversity require teachers who are willing and prepared to cross literacy, poverty, and racial and ethnic borders to build meaningful relationships with students and families. To ensure their capacity to do so, teachers need appropriate professional development and in-school support and guidance.

The Role of Professional Development

For decades, researchers and policy makers have highlighted the importance of professional development that prepares educators to cross borders in order to involve parents in their children's education. Magolda (2001) captured the importance of such professional development in the following statement, "Educators who are interested in reform must not only encourage border crossings but they must also provide the border 'crossers' with the technical, political, and cultural frameworks to support these efforts" (p. 346).

What does this mean for preparing teachers to build relationships with parents? First, it means building the communication skills of teachers so that they are comfortable interacting with diverse families. While teaching and learning require constant communication, teachers are rarely helped to develop and refine their communication skills so that they are effective in a variety of settings and situations. Communication skills that teachers need to learn and practice in order to engage in meaningful dialogue with parents include effective listening, giving and receiving negative information, and problem solving (Swap, 1993).

Similarly, while conflict is inherent in most relationships, especially as those relationships deepen, teachers are not prepared to deal constructively with conflict. As a result, relationships often are avoided for fear of conflict or strained due to unresolved conflict. If teachers are expected to work successfully with students' families, then they must be helped to view conflict as a natural aspect of relationships and provided the management tools needed to deal effectively with such conflict (Lawrence-Lightfoot, 2003; Swap, 1993).

Third, teachers must be helped to understand and embrace cultural difference so that they might cross borders effectively and model for students how to function in increasingly diverse social and work environments. If schools are to act as institutions of learning as well as of social cohesion and progress, then teachers must be given the tools needed to work successfully with *all* students and their families. Research suggests that these tools are best honed through field experiences that provide practical and authentic learning opportunities (de la Piedra, Munter, & Giron, 2006).

Finally, teachers must understand why they need to work with students' families. The research is vast and compelling, yet many teachers leave their initial preparation program without being exposed to the literature on, or to "best practices" in home–school relations (Epstein & Sanders, 2006). If the twenty-first century is to see significant improvement in the teacher–parent relationship, then this gap must be addressed. This is true for teachers working with young children and their families, as well as adolescents and their families. While some teachers and parents feel that their interaction is not needed as students' progress through the educational pipeline, research shows that this is not the case. While the teacher–parent relationship changes as the child ages, it is nevertheless critical for positive student outcomes. Research on parent involvement in secondary schools suggests that perceived invitations from teachers remains a significant predictor of parental reports of involvement (Deslandes & Bertrand, 2005).

In addition to preservice and inservice training, the research strongly suggests that teachers require support from school administrators to successfully build relationships with all students' families. Expectations for outreach, along with support in terms of time, guidance, resources, and rewards are needed to assist teachers in carrying out the important but often challenging tasks of providing high quality instruction within the classroom and building bridges between the classroom, the home, and the community. The teacher–parent relationship, then, cannot be viewed in isolation. It both affects and is affected by the broader school context and culture (Epstein, 2001; Swap, 1993).

Conclusion

While similarities between nations is increasing through the process of globalization, profound differences remain in schools, teacher preparation, and teacher working conditions that make writing for an international handbook on teachers and teaching challenging. What I have attempted to do in this chapter is synthesize key issues related to teachers and parents that have permeated the literature for the last decade. This literature highlights not only what we know about the teacher–parent relationship; but also what we must do to ensure that this relationship realizes its potential to produce positive results for students, families, and schools.

More specifically, this chapter describes several international trends that are producing increasingly diverse student populations. In order for teachers to develop the kinds of relationships with these students' families that have been linked to enhanced achievement and school success, they must be prepared to act as border crossers. By crossing literacy, poverty, and ethnic and racial borders in order to partner with the families of *all* students, these teachers can create inclusive learning environments that promote positive educational outcomes. Teachers, however, must be supported in this role by teacher-educators and school administrators who realize the critical importance of the teacher–parent relationship within the context of home, school, and community partnerships.

Biographical Note

Mavis Sanders, PhD in education from Stanford University, holds a joint appointment as research scientist at the Center on School, Family, and Community Partnerships and associate professor in the School of Education at Johns Hopkins University. Her research and teaching interests include school reform, parent and community involvement, and African-American student achievement. Her most recent book, *Building School-Community Partnerships: Collaboration for Student Success*, was published by Corwin Press in 2005.

Notes

1. The term "parent" refers not only to biological parents, but also to primary adult caretakers in a child's life, including but not limited to adoptive parents, grandparents, foster parents, and other extended family members. Throughout this chapter, the terms, "parent" and "family" are used interchangeably.

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TEACHER COMMITMENT

Nordin Abd Razak, I Gusti Ngurah Darmawan, and John P. Keeves

Introduction

Teachers play an important role in educating the future members of a society through their work in schools. Furthermore, teachers in institutions of higher education, in technical training colleges and in centres of lifelong learning and recurrent education play a critical part in advancing economic and technological development as well as sustaining the well-being of the societies they serve. Consequently, the factors influencing the levels of commitment of the teachers in schools and in the wider education systems must necessarily be the focus of an important field of research leading to the introduction of reform and change within classrooms and lecture theatres, schools, institutions and learning centres, and national systems of education. This chapter is not only concerned with the importance of teacher commitment at all levels of education, with conceptualizing teacher commitment and with the dimensions or different types of commitment, but also with the influences of leadership and working conditions on teacher commitment as well as with the development and maintenance of high levels of commitment among teachers. In addition to considering the effects of antecedent personal characteristics of teachers on their levels of commitment, this chapter also considers the effects of social groups, such as the body of teachers within a school or institution on the individual members of the group. Of particular importance are the effects of the operations of the teacher unions within the education systems of Western countries on the commitment of their members who work within schools and institutions.

It is argued in this chapter that very little research into the commitment of teachers and other educational workers has been undertaken within systems of education and between systems to examine the differences between the different cultural and religious groups that conduct schools and institutions. This lack of research into teacher commitment is in part a consequence of the fact that teachers and other educational workers are tightly clustered within schools and institutions, and it has not been possible until recently to take this clustering within schools and institutions into consideration in the analysis of data. As a consequence it has not been possible to identify the factors that influence the levels of commitment of individuals or the members of the groups collectively, as well as the interaction effects between the

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groups and the individuals within the groups. Furthermore, it has not been possible to examine the influences of teacher commitment at both the group and individual levels on the recognized outcomes of education of achievement, participation, retention, attitudes and values. The advances that are taking place in educational research that arise from the collection, storage and examination of data through the use of computer-based technology as well as the rapid evolution of procedures of analysis that is occurring make research in the field of teacher commitment an important one for educational planning and development at all levels.

The Importance of Teacher Commitment

The quality of an education system and the profession of educators within a system depends mainly on the teachers who guide and carry out most of the tasks and activities of education that take place within the schools and institutions in the system (Tsui & Cheng, 1999). Moreover, the teachers play a very significant role in supplying, supporting and promoting instruction and learning of high quality. Working in both classrooms and other groups, teachers are under pressure to provide for and sustain high levels of performance, attitude and behaviour in those whom they teach. Many studies have shown that the quality of teaching was a major influence on student achievement (Darling-Hammond, 2000). Moreover, Carroll (1963) identified quality of instruction as a key variable in his model of school learning alongside opportunity to learn, both of which were dependent on the teacher. It is not surprising that teachers and their commitment to their work are exposed to scrutiny and sometimes critical comment from politicians, policy makers, employers, parents, students and other stakeholders. Policy-makers and society at large have high expectations of teachers as professional persons, role models and community leaders. Teachers are commonly asked to manage the far-reaching changes that are taking place both inside and outside schools and institutions of higher education and to implement complex reforms in education systems. The gradual shifts to life-long learning and development alongside the expansion of university and technological education are making growing demands on those who work in such fields, because the resources provided for such changes, that are extremely expensive, even when supported by industry and commerce, are limited. Quality education cannot be achieved without the efforts of dedicated and highly committed teachers. Committed teachers must inculcate and nurture values that will guide the subsequent use of the learning of both knowledge and skills in the wider world outside the classroom and lecture theatre. Park (2005) advanced two strong reasons why teacher commitment should be emphasized in the fields of education. First, commitment was an internal force coming from within teachers themselves who had needs for greater responsibility, variety and challenge in their work as their level of participation in education had grown. Second, there were external forces directing both reform and development in education and seeking higher standards and greater accountability, that were dependent upon each teacher's combined efforts, as well as the sustained efforts of the teachers within each school or institutional group.

Firestone and Pennell (1993) from a review of research into teacher commitment reported that committed teachers were believed to have strong psychological ties to their schools, to their students and to their subject areas. Moreover, they argued that voluntary commitment was essential. Weick (1976) also contended that committed teachers were of even greater importance in a loosely coupled type of organization, such as public schools and institutions, where it was difficult to inspect and control what teachers were doing in their self-contained classrooms. Subsequently, Weick (1983) examined the nature of school organizations where there were the following working conditions: (a) limited amount of inspection and evaluation, (b) professional autonomy of teachers, (c) indeterminate goals, (d) administrators' limited control over teachers, and (e) a large span of activities involved. He found that a great deal depended on each individual teacher's initiative and effort in bringing efficiency and effectiveness into the classrooms where teaching occurred.

Reyes (1990) identified the positive characteristics of a highly committed teacher when compared to an uncommitted teacher. In addition, Reyes (1990) in linking commitment of teachers in the workplace to performance and productivity found that a committed teacher was likely to: (a) be less tardy, work harder and be less inclined to leave the workplace; (b) devote more time to extra-curricular activities in order to accomplish the goals of the school and school system; (c) perform work better; (d) influence student achievement; (e) believe in and act upon the goals of the schools and system; (f) exert efforts beyond personal interest; and (g) intend to remain a member of the school system. This is why commitment has become an important characteristic of a teacher that needs to be nurtured and developed among teachers in schools. As a consequence, the conditions necessary to promote and support highly committed teachers are of great concern in both schools and education systems.

Outside the field of education, during the past two decades, commitment has received a great deal of attention, particularly in organizational studies (Brown, 1996; Lok & Crawford, 2001). However, in the field of education, research into teacher commitment has been very limited in comparison to research into commitment in other occupations (Reves, 1990). Reves also argued that very few studies had used educational organizations as the unit of analysis. Somech and Bogler (2002) subsequently endorsed this assertion made by Reves (1990) and claimed that the study of commitment, particularly in the teaching profession, had remained largely unexamined by educational research workers. Nevertheless, teacher commitment has been considered to be a crucial factor in influencing school effectiveness, teacher satisfaction and teacher retention (Fresko, Kfir, & Nasser, 1997; Singh & Billingsley, 1998). Riehl and Sipple (1996) also argued that teacher commitment was one of the significant factors that was able to improve educational outcomes, especially student academic achievement. Another study reported by Bryk and Driscoll (1988) employing multilevel analysis procedures to examine contextual influences and their consequences for both students and teachers showed that teachers' commitment to their work increased students' commitment. However, Joffres and Haughey (2001) argued that the findings from most of the studies on teacher commitment were far from consistent, partly because of the methodological issues involved and partly because of the limitations of existing theoretical frameworks that guided most of the research into teacher commitment.

Conceptualizing Teacher Commitment

Commitment has received a great deal of attention in business and organizational studies, compared to the relatively little research that has addressed commitment among teachers. In organizational studies, an important distinction has been made between attitudinal and behavioural commitment (Mowday, Porter, & Steers, 1982). Mowday, Steers, and Porter (1979) defined organizational commitment as the relative strength of the identification of individuals with and involvement in their particular business organization. Mowday et al. (1982) also argued that the attitudinal conceptualization of commitment included at least three factors: (a) a strong belief in and acceptance of organizational goals and values; (b) a willingness to exert considerable effort on behalf of an organization or profession; and (c) a strong desire to maintain membership in an organization or profession. In contrast, a behavioural view of commitment has been considered to be a function of the costs and rewards associated with membership of an employing organization or profession (Reichers, 1985). This view was derived from Becker's (1960) argument, that attachment to specific rewards in a present organization or profession that were not easily transferable might be more important for the individual than a new position with a higher income and better working conditions.

Allen and Meyer (1990) and Meyer and Allen (1997) contended that previous research had misunderstood the relationship between attitudinal and behavioural commitment. They argued that commitment should be viewed as a psychological state, since it was concerned with the way the employees conceptualized the nature of their work relations with their employer, and this had implications for them to continue their membership in the organization. They stated that attitudinal and behavioural commitments were not incompatible, since the distinction between them helped to clarify the diverse aspects of the meaning of commitment and had implications for both individuals and organizations. This led Meyer and Allen (1997) to clarify the nature of different psychological states that included: (a) affective commitment, that referred to the employee's emotional attachment to, and identification and involvement with, an organization; (b) continuance commitment, that described the employee's awareness of the costs of the employee leaving the organization; and (c) normative commitment, that was based on continuance commitment and stressed the importance of obligation. Their conceptualizations of affective, continuance and normative commitment were viewed as components, rather than types of commitment, because an employee's relationship with an organization might reflect varying degrees of all of these three components. This recognition that commitment might have multiple forms was an important conceptual advancement.

Brown (1996, p. 232) proposed the elimination of the distinction between the attitudinal and behavioural approaches to commitment and the three types of

commitment (affective, continuance and normative) and simplified the idea of 'commitment' into a single concept:

Commitment to a particular entity is a distinct phenomenon, albeit a complex one that may differ depending on how certain factors, pertinent to all commitments, are perceived and evaluated by an individual.

In addition, Brown (1996) referred to a set of specific factors that were common to all commitments. These factors were: 'focus, terms and strength'. Based on these ideas proposed by Brown, a teacher might have several foci of commitment that were related to the strength of psychological attachment to the focus of commitment, for example, the school, the students, teaching work, the profession, or the subject taught. The second factor, 'terms', might involve an agreement to work in a particular school for a defined period of time, for example, to work in a particular school in a rural region for 5 years. The third factor, 'strength', was related to the intensity of commitment.

The idea of multiple components or foci of teacher commitment implies that the components may be correlated or may be independent of each other. This seems to be an appropriate approach to pursue. Carmelli and Freund (2004) advanced three reasons why different foci of teacher commitment could be considered to be meaningful: (a) teachers might have developed different forms of commitment to teaching; (b) these distinct forms of teaching commitment might affect the outcomes of teaching commitment differently; and (c) different forms of teaching commitment might contribute to different teaching commitment models in different ways and to different extents.

Hargreaves (1998) contended that teaching had meaning and purpose for all who participated in it and consequently could be said to be a 'moral craft'. These purposes involved the things that teachers did and did not value, and the things that they sought to achieve through their engagement in teaching. Changes that did not address these purposes often led to resistance of the proposed changes, because teachers were not committed to the purposes. Nias (1989) described from interview studies three types of commitment expressed by primary school teachers, namely 'vocational, professional and career continuance' commitment. However, these types of commitment did not indicate three kinds of teacher, although one type of commitment was frequently dominant in a particular individual.

The idea of different types of teacher commitment in which the types or components may or may not be correlated appears to provide a way in which the concept of 'teacher commitment' can be operationalized in the field of educational research. This approach recognizes that attitudes and values are involved and are expressed in the form of behaviours that result from the motivational purposes of the commitments held by individuals. However, the idea of different types of commitment also supports the view that within an organization or profession there is a collective commitment of the group of individuals involved that has the capacity to influence both directly and indirectly through moderating or mediating the educational outcomes of both individuals and groups. This conceptualization of commitment operating at two or more levels, since the education system may also be involved, appears to be relatively new to the field of educational research. Four and possibly five types of teacher commitment can be advanced that do not necessarily mirror the types of commitment found in business organizations or other professions, such as the medical profession, although medical practitioners are beginning to work as teams not only in hospitals, but also in what are sometimes referred to as 'practices'. These types of commitment of teachers are:

- 1. teacher commitment to the school,
- 2. teacher commitment to the student,
- 3. teacher commitment to teaching work, and
- 4. teacher commitment to the profession.

However, in higher education there is clearly a commitment among many teachers at this level to a body of knowledge that is constantly and systematically evolving as the result of research. This commitment to a body of knowledge is very different from commitment to the work of teaching and instruction. Furthermore, with the expansion of higher education this type of commitment that involves engagement in research is under challenge because of the associated costs of time and financial resources. This commitment to knowledge is also under challenge that results from the commercialization of higher education as Bok (2003) has forcefully argued in his call on teachers at the university level to defend their academic values that formed the 'glue that binds together an institution They keep the faculty focused on the work of discovery, scholarship and learning despite the manifold temptations of the outside world' (Bok, 2003, p. 206). Furthermore, this commitment to a body of knowledge or a discipline may also operate at the upper secondary school level, with proposals that some teachers in schools need to be engaged in research. In addition, with the rapid changes that are taking place in the use of technology in the Western world, there is a growing need for those teachers engaged in technical and recurrent education to be committed to the body of knowledge, attitudes and skills that are specific to particular vocational fields. This fifth type of commitment can be referred to as:

5. teacher commitment to a body of knowledge, attitudes and skills.

We argue that this type of commitment is of emerging importance with the rapid expansion of knowledge and the developments in technology. It is also argued that this type of commitment, while being related to, is separate from commitment to a profession, or commitment to the work of teaching as is argued in the sections that follow on the four basic types of teacher commitment.

Teacher Commitment to School

Commitment to school has been variously defined, measured and researched (Meyer & Allen, 1997; Morrow, 1983; Reichers, 1985; Yousef, 2000). In the definition given by Mowday et al. (1982), it was stated that teachers who were highly committed to their school were expected to engage in behaviours that helped the school to achieve its goals, to exert considerable effort beyond nominal expectations and remain working with the organization. Teacher commitment to school has been studied to examine both its nature and effects by a number of researchers, such as Bogler and

Somech (2004), John and Taylor (1999), Kushman (1992), Shaw and Reyes (1992) and Somech and Bogler (2002).

Teacher Commitment to Students

Kushman (1992) argued that commitment to students, and student learning was grounded in the ideas of high teacher efficacy and high expectations and teacher willingness to exert efforts on behalf of both low and high achieving students. Kushman also claimed that this facet of teacher commitment focused on students, teaching and on the student achievement mission of schools. This form of commitment according to Louis (1998) motivated teachers to deal with students undergoing personal crises, or to be more sensitive and aware of student learning and development, as well as their achievement. In addition, low levels of teacher commitment resulted in reduced student achievement, less sympathy towards students, lower tolerance for frustration in the classroom and teachers felt more anxious and exhausted (Firestone & Pennell, 1993). Such teachers also developed fewer plans to improve the academic quality of their instruction. Rosenholtz (1989) also asserted that teacher commitment to students led a positively engaged teacher to work harder, and made classroom activities more meaningful, introducing new ways of learning, and altering the presentation of materials so that they were more relevant and of greater intrinsic interest to students. Highly committed teachers were more likely to work with students in extra-curricular activities that helped to bind students to the school and its program. Rosenholtz's (1989) study found a positive relationship between teacher commitment and student achievement after controlling for the effects of socio-economic status.

Teacher Commitment to Teaching Work

Commitment to work or an occupation, according to Warr, Cook, and Wall (1979, p. 139) was the 'degree to which a person wants to be engaged in work', while Lodahl and Kejner (1965) defined commitment to job or work as the extent to which a person identified psychologically with his or her work. Moreover, Morrow and Wirth (1989) as well as Vandenberg and Scarpello (1991) defined occupational commitment as a person's acceptance of the values of his or her chosen occupation or line of work, and a willingness to maintain membership in that occupation. Commitment to an occupation involved that was based on an affective reaction to that occupation (Lee, Carswell, & Allen, 2000).

Based on these views, teacher commitment to work was the psychological link between the teacher and his or her teaching work or occupation. It involved the teacher's willingness to exert the effort to provide effective teaching, to show greater enthusiasm to teach the subject matter and as a consequence to devote extra time to students as persons as well as the subject taught (Tyree, 1996). Clearly, the commitment of a teacher to teaching played an important role in determining how long the teacher wanted to remain in the profession (Chapman, 1983; Chapman & Lowther, 1982; McCracken and Etuk, 1986).

Teacher Commitment to Career or Profession

Blau (1985, p. 278) defined 'career' or 'professional commitment' as 'one's attitude towards one's profession or vocation'. Career commitment was also defined by Colarelli and Bishop (1990) as the advancement of individual vocational goals and the drive associated with completing those goals. In addition, Somech and Bogler (2002) stated that teacher commitment to the teaching profession involved an affective attachment to the profession or occupation, that was associated with personal identification and satisfaction as a teacher. Career commitment was seen as important because it enabled a teacher to develop the necessary skills and relationships to have a successful career, regardless of the school or institution within which he or she was employed.

According to Meyer, Allen, and Topolnytsky (1998), individuals might choose to redirect their emotional energies towards the profession to which they belonged. There were at least two implications of this. First, such individuals might be more likely to participate in the work of their professional associations. Second, a focus on the profession might increase the likelihood that employees would improve their professional skills, knowledge and abilities and thus enhance the quality of their work. From the above discussion, it can be argued that teacher commitment to a career or profession is the strength of motivation to work, and to improve professional skills, and the ability to work as a teacher. Professional commitment can be described as seeking to attain the highest standards as a member of a professional group through behaviour that is ethical and effective.

These four components or dimensions of teacher commitment, together with the further type of commitment advanced above are concerned with commitment to a body of knowledge, attitudes and skills that form a foundation on which to build the concept of 'teacher commitment'. All types of commitment are important in the different educational settings in which teachers work and are necessary in order to accomplish the various objectives advanced by those who are the stakeholders in education: politicians, community leaders, employers, parents and school council members, as well as the teachers and the students themselves. Greater student diversity, larger numbers of so-called 'at risk' students and the need for a better prepared teaching work-force present challenges to schools and other educational institutions that can not be met without a high level of commitment from teachers and groups of teachers.

Measuring Teacher Commitment

In order to measure the constructs associated with the types of teacher commitment, these constructs need to be operationalized and instruments need to be developed. Operationalizing involves identifying the key characteristics associated with each construct for subsequent use in the instruments under development. The most commonly used type of instrument involves Likert scales with item statements to which respondents are asked to indicate strength of agreement or disagreement, generally using four categories 'strongly disagree', 'disagree', 'agree' or 'strongly agree' as best describing their attitudes or views of a statement that is associated with behaviour. The teachers' responses are best scaled using Rasch scaling procedures to provide measurement on an interval scale that is independent of both the persons and the items used to calibrate the scale, provided the persons and the items satisfy the requirements of unidimensionality. Such items can be combined to form scores using the partial credit Rasch scaling model, provided the items satisfy the requirement of consistency with the Rasch model. A second approach to assessment involves the use of a structured interview in order to assess a respondent's or teacher's attitude or behaviour and the coding of responses in terms of defined categories. The responses to the questionnaire items are submitted to principal components analysis to ensure that the item responses form a single scale, with non-conforming items being excluded. Principal component scores are then calculated and the reliability or internal consistency of the scale is estimated. A third approach to measurement involves the use of a nine-category rating scale that has the rubrics defined for the five odd-numbered categories using the characteristics identified as being associated with the construct under investigation. The coding of the rating scale is generally done by a person who supervises the work of each person being assessed and is able to assess the level of attitude or behaviour with respect to the characteristics involved in the construct. If possible it is desirable that two assessors should independently rate the person under review and from these ratings an estimate can be calculated of the reliability of the ratings made and an average rating obtained. In order to use these instruments effectively to assess teachers' opinions, attitudes and behaviours, the items and the rubrics included in such instruments need to be constructed carefully so that they can serve to provide consistent and meaningful scores. Therefore the instruments used need to reduce the measurement errors and be strong in meaning with respect to the underlying constructs. In order to form strong instruments for use in a particular situation, it is essential that the instrument is submitted to trial in an appropriate and similar situation followed by the necessary refinement of the instrument before use, initially in a research study. Generally, previous research studies can be found that have employed instruments to assess similar constructs, and can provide ideas for items, statements and rubrics for use in subsequent studies. The strength of any subsequent study is heavily dependent on the quality of the instruments employed.

Influences on Teacher Commitment

There are four major factors, apart from antecedent conditions, that are considered to influence the commitment of teachers to different aspects of their engagement as teachers of students. These factors are: (a) configural and contextual effects, (b) leadership effects, (c) working conditions and (d) cultural effects. Each of these factors is considered in turn, with subsequent consideration being given briefly to antecedent conditions that involve teacher gender, teacher age and teaching experiences, among other characteristics.

Configural and Contextual Effects

The development of multilevel methods of analysis has helped greatly to clarify the concepts of 'configural' and 'contextual' effects. Characteristics of teachers, including their attitudes and behaviours, can be aggregated to the school, regional or system levels and as such the aggregated data represent the characteristics of the group involved rather than the characteristics of the individuals who form the group. This group level factor can not only influence directly other characteristics at the group level, referred to as a 'configural effect', but can also have a moderating or interactive effect on the characteristics of individuals within the group, referred to as a 'contextual effect'. Furthermore, a system level factor can have both configural and contextual effects on the group as well as the individuals within the group. Multilevel analysis using hierarchical linear modelling (Bryk & Raudenbush, 1992) has the capacity to transform research into teacher commitment through the ease with which it enables both configural and contextual effects to be estimated and the interactive effects presented graphically in ways that facilitate understanding and explanation.

Leadership Effects

Leadership is one of the most popular topics in organizational research at the beginning of the twenty-first century. While it has been a topic of interest for many years it remains difficult to find a single widely accepted definition of the concept of leadership (Leithwood, Jantzi, & Steinbach, 1999). Bass (1990) concluded that although the definitions were almost innumerable, they did provide a rough classification scheme, and stated:

Leadership has been conceived as the focus of group processes, as a matter of personality, as a matter if inducing compliance, as the exercise of influence, as particular behaviours, as a form of persuasion, as a power relation, as an instrument to achieve goals, as an effect of interaction, as a differentiated role, as an initiation of structure, and as many combinations of these definitions. (Bass, 1990, p. 11)

Bass (1990) further claimed that the particular definition adopted was largely influenced by the purpose for which it was to be used, either to identify the object to be observed, to identify a form of practice, to satisfy a particular value orientation, to avoid a particular orientation or implication for a practice, or to provide a basis for the development of theory. In many definitions, the term 'influence' played a strong part in the definition. Leithwood et al. (1999, p. 6) noted that 'influence ... seems to be a necessary part of most conceptions of leadership'. Based on their analyses of

leadership definitions in educational research, Bush and Glover (2003, p. 8) defined leadership in the following words:

Leadership is a process of influence leading to the achievement of desired purposes. Successful leaders develop a vision for their schools based on their personal and professional values. They articulate this vision at every opportunity and influence their staff and other stakeholders to share this vision. The philosophy, structures and activities of the school are geared towards the achievement of this shared vision.

Perhaps the most important aspect of both schools and school systems that leaders in the field of education can influence is the commitment of teachers to their engagement with their students and their work.

From the work of Bass (1985), Leithwood and his colleagues developed the idea of 'transformational leadership' in an educational environment. His models of transformational leadership consisted of seven behavioural components: individualized support, shared goals, vision, intellectual stimulation, culture building, rewards, high expectations, and modelling behaviours (Leithwood, 1994). Subsequently, Yu, Leithwood, and Jantzi (2002, pp. 373–374) extended this model and used it to investigate the influence of transformational leadership on teachers' commitment to change.

In-School Working Conditions

The success of a school and an education system depends mainly on the quality of its teaching staff. Rivkin, Hanushek, and Kain (2005) in a recent research study identified teacher quality as one of the most important school-related factors influencing student achievement. However, the components and characteristics associated with teacher quality have proved difficult to identify. Nevertheless, recruiting and keeping good teachers who were the most valuable resources in education was argued to be the most important task for school leaders (Darling-Hammond, 2003). As a consequence, school leaders needed to provide in-school working conditions in which teachers could grow professionally, and create work environments that could sustain teachers' involvement and commitment (Billingsley, 2004). Louis and Smith (1990) argued that working conditions affected the degree to which teachers were actively committed to and engaged in teaching. These conditions affected the likelihood that teachers would work hard to create an exciting learning environment in their classrooms. Thus it was inferred that teacher in-school working conditions and student learning environments were inextricably related (Rosenholtz, 1989).

Leithwood and Jantzi (1999) selected five in-school conditions as mediators of the relative effects of principal leadership on students' and teachers' engagement in schooling. These five factors of in-school conditions were: (a) purpose and goals; (b) structure and organization, (c) organizational culture, (d) information collection and decision making; and (e) planning. Leithwood and Jantzi (1999, 2000a, 2000b) found significant effects of principal leadership upon student engagement operating through a variable involving in-school working conditions.

The task of operationalizing the idea of in 'school working conditions' can involve different organizational models that give rise to subscales, each of which can yield effective measures of the underlying construct. The underlying scales that were formed by Abd Razak (2007, pp.112–113) each with several subscales were: (a) school purposes and goals; (b) internal stability and control; (c) human relations and development; and (d) monitoring and managing the school environment. The measurement on the scales and subscales was undertaken using Likert type view scales and Rasch scaling, together with principal component scaling procedures.

Culture

Although the idea of 'culture' is used rigorously in other fields, such as cross-cultural psychology and international business, investigations of the effects of culture in the fields of educational administration and management, and educational leadership are rare. Not only between countries, where cultural differences are likely to have substantial effects, but also within countries where different ethnic and racial groups, as well as different religious groups, are permitted to conduct their own schools within their own education systems, the effects of cultural differences remain largely ignored and not subjected to systematic investigation. The effects of cultural differences are likely to be both configural and contextual in nature resulting from the aggregation of individual characteristics to the level of the cultural group. Furthermore, these cultural differences are likely to have both moderating and mediating effects on school leadership factors and in-school working conditions and through these factors they can influence teacher commitment.

The influences of the effects of cultural differences arose in an educational context almost four decades ago in relation to the research activities of the International Association for the Evaluation of Educational Achievement (IEA) undertaken by their colleagues of the University of Chicago, when Getzels, Lipham, and Campbell (1968) proposed a model where they located the school administrator within a sociocultural context. They suggested that cultural values could have a substantial impact on the thinking and behaviour of leaders and teachers in the field of education. More recently, Hallinger and Leithwood (1996, p. 102) stated that:

The objectives, curricula, methods and administrative policies and procedures ... must be understood in the context of the culture and the component values to which they are invariably related.

More recently, Walker and Dimmock (2000a, 2000b, 2000c) emphasized that research into school leadership needed to be contextualized and to take into account the culture in situations where leadership was practised in order to obtain a better understanding of school leadership. Keeves and Watanabe (2003) argued that the dominance of the United States in the field of educational research and development was having a detrimental effect in the Asia-Pacific region through ignoring the effects of cultural differences and the developments that were taking place in the region. The availability of multilevel modelling procedures now enable the effects of cross-cultural differences on such important variables as those associated with teacher commitment to be examined in a systematic way.

The work of Hofstede (1980, 2001) has identified four major dimensions of cultural values: individual-collectivism, power distance, uncertainty avoidance and masculinity-femininity. These four dimensions and the instruments developed by Hofstede provide a foundation from which the effects of cultural differences on the different types of leader commitment can be investigated.

The Effects of Antecedent Characteristics

The school is an organization that has special characteristics, which differentiate it from other types of organizations. One of these characteristics and almost certainly the most important is the commitment of teachers to their engagement with their students. In addition to the four factors discussed above that are likely to have significant effects either directly or indirectly on teacher commitment are the antecedent conditions associated with individual teachers. The teacher characteristics of interest are: (a) teacher gender, (b) teacher age, (c) ethnicity, (d) marital status, and (e) educational attainment, and two job-related factors: (f) total years of teaching experience, and (g) years of teaching in the present school.

No clear pattern has emerged of the effects of these seven characteristics of individual teachers from previous research studies. Moreover, moderating and mediating effects have rarely been examined, and group effects with aggregated data, with the exception of the study by Bryk and Driscoll (1988) into contextual influences, and their consequences for students and teachers would not appear to have been investigated in analytical studies.

The Role of Teacher Unions

There is a further force operating that cuts across the professional interests of teachers, and that influences considerably their working conditions in schools, and the roles of the leaders in schools and school systems. As a consequence, this force both directly and indirectly influences the levels of commitment of individual teachers. This force is the teacher unions that exist in most Western countries. Initially in the middle of the nineteenth century teacher organizations were formed in France and Germany and subsequently in Australia and Canada in the 1870s as associations to enhance the public status, social and professional fellowship and training of teachers. These organizations became the beginnings of teacher unionism that emerged in the decades before and shortly after the turn of the twentieth century in Germany, the United Kingdom, Scandinavia and the Australian colonies (Spaull, 1998). This development of teacher unions followed as a consequence of the growth of education systems associated with the establishment of free and compulsory education, as well

as the decline in teachers' salaries, poorer working conditions and the increased centralized control of schooling. In the period between the First and Second World Wars that also involved the Great Depression, teacher unions fought for accepted salary scales, such as the national salary scale in England that was established in 1919, together with official recognition and the incorporation of the unions by the respective states. A further phase in growth of the teacher unions occurred in the period following the Second World War, that again was a consequence of the growth of the secondary schools and the increase in enrolments that occurred after World War II. These developments imposed considerable strain on school systems around the world and led to increased teacher militancy in the struggle for qualified teachers and greatly improved working conditions. Furthermore, the centralization of control in the school systems led to a reduction of the powers of school principals, industrial action, strikes and boycotts and some intervention in the electoral processes, since teachers formed an increasingly powerful voting block (Spaull, 1998).

These union based activities led to a shift in teacher commitment from the school system in which the teachers served, to the teacher unions. This shift involved a change from teachers considering themselves to have a commitment to their profession to their active participation in union activities and from the making of decisions regarding school governance by the central administration of a system to union control of school-based committees. The decade prior to the turn of the millennium and the years since saw growth in a movement towards greater decentralization of education, greater control of each school by the principal guided by a school council drawn from the wider community, the operation of formalized committee structures within schools that were democratically based and greater flexibility at the school level in the appointment of staff. These changes led to some reduction in the power of the teacher unions.

These successive moves also changed in different ways the commitment of teachers to different aspects of their work. However, little research has been undertaken into teacher commitment and no monitoring of teacher commitment over time has been attempted, possibly because the teacher unions still have considerable power in most countries of the world where unions are in operation.

Conclusion

This chapter advances ideas and relations associated with teacher commitment primarily in schools, but with recognition that teacher commitment is important in all fields and at all levels of education. The body of research findings on which these ideas and relations are based is very limited, because only a relatively small amount of research has been done in this area. In part this is because the foci of research over recent decades have been largely on the performance of students and the effectiveness of schools, and not on the work of teachers within schools. However, it has also been due to the limitations of the analytical procedures that have been available in the past. These limitations have prevented multilevel analyses being carried out to examine the interrelations between students and their teachers, who are both nested within schools. The recent developments of hierarchical linear modelling (Bryk & Raudenbush, 1992) and multilevel mixture modelling with MPlus (Muthén & Muthén, 1998) provide for the analyses of data to examine direct, moderating and mediating effects at two and sometimes in analyses at three levels. These analytical procedures have recently been explored by Abd Razak (2007) to examine many of the ideas and relationships advanced in this chapter into the effects of different factors on teacher commitment in a setting where three cultural groups conducted schools within the one school system in Malaysia. There is nothing presented in this chapter that runs counter to the findings of this work. However, much more research remains to be done in this field.

In many developed countries there are substantial problems facing education. They involve: (a) the increasing participation of each age cohort in education at the postcompulsory level in secondary schools, universities and technical colleges; (b) the ageing of the teaching service in many countries, as a consequence of the expansion that took place in the 1960s and 1970s; (c) the serious shortage of mathematics, science and technology teachers at a time when it is increasingly being recognized that these fields contribute greatly to national economic and technological development; and (d) the recognition that universities, technical institutes and lifelong learning and development centres have an important role in a period of changing climatic conditions and a population explosion. These problems can only be solved through the strong commitment of teachers to education at all levels. Furthermore in the developing countries the problems of: (a) raising levels of literacy, (b) increasing the participation of girls and women in education, (c) reducing population growth and (d) advancing economic and technological development, are perhaps even more crucial than those facing the more highly developed countries. Again, the resolution of these problems depends on the total commitment of the teachers working in all countries and at all levels of education. Research into teacher commitment has become a critical field for research and investigation.

Biographical Notes

Nordin Abd Razak is a lecturer working in the School of Educational Studies, Universiti Sains Malaysia. His teaching and research focus on the educational leadership and management, organisational behaviour from a socio-psychological perspective, science education with a special attention to the topics of culture and values as well as cross-cultural comparative study. His other areas of interest include measurement, multivariate and multilevel data analysis.

I Gusti Ngurah Darmawan is a Lecturer in the field of science and ICT education in the School of Education at the University of Adelaide. His research interests include science education, measurement, multivariate and multilevel data analysis, analysis of frequency and count data, sample design for educational survey research, and ICT in education.

John P. Keeves is a Professorial Fellow in the School of Education at Flinders University. His research interests are wide and varied. From a very strong initial interest in Mathematics and Science Education, he has extended his field of inquiry in these areas from Australia to cross-national and comparative perspectives, and has as a consequence developed a strong interest in educational research methodology and measurement.

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TEACHERS' BELIEFS ABOUT STUDENT LEARNING AND MOTIVATION

Julianne C. Turner, Andrea Christensen, and Debra K. Meyer

Introduction: Why Focus on Teacher Beliefs?

In this chapter we focus on teachers' beliefs about student learning and motivation and their manifestation in classroom instruction. Teachers' beliefs appear to reflect longstanding attitudes, "common sense," and their experiences in education rather than research-based knowledge about learning and motivation. Because teachers' beliefs play a significant role in shaping their instructional behaviors, and thus what students learn, it is important to examine their characteristics, their content, and their expression. Specifically, we address three questions about teachers' beliefs and student learning and motivation: (a) What are beliefs and how do they develop? (b) What beliefs do teachers appear to hold about student learning and motivation? and (c) How do teachers' beliefs and instruction change? We illustrate some of these relationships with examples from our research on motivation and learning in mathematics classrooms. Therefore, we have chosen to focus mostly on practicing, as opposed to preservice, teachers. We conclude the chapter by emphasizing the importance of investigating the contexts of teacher beliefs, which are essential for understanding how beliefs develop, the congruencies between beliefs and practice, and the arduous process of belief change.

Teacher Beliefs: Definitions and Development

The difference between teacher beliefs and knowledge has fuelled much investigation. Furinghetti and Pehkonen (2002) describe two kinds of knowledge: objective knowledge accepted by a community (e.g., official subject matter knowledge) and subjective knowledge. Beliefs represent individuals' subjective knowledge and are distinguished from objective knowledge on several criteria. First, knowledge refers to factual propositions and is subject to the standards of truth, whereas beliefs are suppositions, not subject to outside evaluation (Calderhead, 1996). Second, knowledge is consensual, in contrast to beliefs, which can represent individual ideologies and commitments. Believers know that others may disagree. Third, knowledge does not have a valence, whereas beliefs are held with varying degrees of conviction from strong to weak. For

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example, belief systems contain strongly held central beliefs and less strongly held peripheral beliefs (Green, 1971), a possible cause of inconsistency between stated beliefs and observed practice. Finally, beliefs are affective, episodic, and evaluative in that they frequently assert the existence or non existence of certain entities, such as the stability or malleability of intelligence or motivation (Calderhead, 1996).

Teachers' Beliefs About Student Learning

Nuthall (2004) contends that teachers need "insight into the learning processes occurring in their students' minds and how their teaching interacts with those processes" (p. 276). Yet Kennedy (1999) notes that "teachers often feel that learning outcomes are unpredictable, mysterious and uncontrollable" (p. 528). Lacking insights into the learning process, teachers may rely on several ways to evaluate student learning and instructional effectiveness. These include "commonsense notions," beliefs developed over many years of schooling, or in other ways, such as monitoring student behavior, activity level, or lesson flow and completion.

Teachers appear to be concerned, perhaps understandably, with observable behavior patterns that support the flow of a lesson, such as whether students are paying attention and staying on task, and with students' "ability," personality, and social competence. Anning (1988), in a study of teachers of young children, noted that teachers held commonsense theories about children's learning that focused on the importance of active involvement, on the need for an emotionally secure environment or on the value of exploring open-ended activities, through trial and error. Thus, teachers' beliefs about what is a positive learning environment may not necessarily involve beliefs about what is effective learning.

Prawat (1992) contended that some strong beliefs about teaching and learning hindered teachers' adoption of constructivist, or learning-focused pedagogy. At least two different types of teacher beliefs support this argument. First, many teachers tend to consider both learners and content as fixed, rather than interactive and malleable. These teachers appear to believe that both development and individual differences, such as intelligence, limit their ability to teach the curriculum, so it must be adapted, by style or pace to "fit" students. A corresponding belief is that teachers may assume that if something is taught (i.e., explained or demonstrated), it should be learned (Nuthall, 2004). If students do not learn, the problem is attributed to the inadequacy of the students' (stable) motivation, ability or persistence, but not to the instruction (Floden, 1996). Such beliefs are in stark contrast to beliefs that guide an interactive approach, described by Gallimore and Tharp (1990) as instructional conversations, in which teachers closely observe students' learning. They suggest that teachers may not know how to converse with students because "[o]pportunities for such careful observation of the child's in-flight performance are rarely available in typical American classrooms" (p. 198). In addition, teachers may believe that instructional conversations are not viable among a diverse group of students or are not the appropriate means to the student outcomes that are being targeted.

Content is also seen as fixed, "a course to be run," given by "experts," and its relevance or importance for students not questioned. As mentioned previously, teachers' beliefs about what is successful teaching and learning may guide practices

that focus primarily on implementing lessons. As research on teacher beliefs has noted, teachers are often not focused explicitly on learning, but rather on managing classroom activity and on completing it. Fischler's (1994) analysis of a beginning physics teacher's lessons illustrates the primacy of a lesson's completion over students' understanding. When his inquiry lesson plans did not succeed, the teacher focused narrowly on the few students who could provide correct answers. The teacher explained his instructional decisions by saying that he wanted to "make progress," and that it was important to continue the lesson and "achieve a certain conclusion." despite the fact that students' behavior indicated they did not understand. The students' behavior was seen not as an indication of problems with the learning process, but with their failure to promote the *teaching* process. Similarly, Putnam (1987) found that during tutoring, teachers appeared to move through a curriculum script, using activities and strategies for *teaching*, rather than use a diagnostic model through which teachers could form a model of students' understanding. This research indicates that teachers may see curriculum as fixed, adapt it to students through lessons and instructional strategies, and equate successfully navigating the lesson with student learning. Teachers are more likely to adapt to students and content, rather than change them, through meaning-making.

Second, Prawat (1992) asserted that teachers adopt a "naïve constructivism," the tendency to equate activity and "motivation" with learning. Students' apparent interest and involvement, rather than comprehension or explanation, are often considered both necessary and sufficient for learning. For example, "hands-on," rather than "minds on," activities are often credited with fostering learning. Such teacher beliefs were illustrated in Levitt's (2001) interviews of science teachers during a professional development project. Teachers commented that "The students actually get to touch instead of saying, 'look at the picture.' They're actually doing it. They're noisy; it's busy noise" (p. 13) and "... they're discovering on their own ... they get more out of doing it themselves" (p. 11). Teachers' goals were for students to "enjoy science" and "have fun" rather than to demonstrate understanding (p. 17). Coupled with the notion of engagement, many teachers regard activities, as opposed to ideas, as the essence of planning, and little thought is given to the intellectual implications of an activity (Yinger, 1980). Eisenhart, Shrum, Harding, and Cuthbert (1988) also concluded, "Teaching activities directed toward developing students' enthusiasm and ability to continue learning are more important to teachers than solely transmitting a particular subject matter" (p. 57).

In summary, teachers' beliefs about learning appear to rely on a great deal of visible, behavioral evidence rather than on assessment of student meaning-making. Nuthall (2004) argues that for teachers to understand the relation between teaching and learning, they must understand (a) how instruction, management and assessment influence student experience and behavior; (b) how the sociocultural context (classroom instruction, interpersonal relationships, and intrapersonal factors) influence teaching and learning; and (c) how individual students make sense of their classroom experiences. In the next section, we review research on teacher expectations, which offers insight into Nuthall's three criteria for understanding the relation between teaching and learning. The lens of teacher expectations and

differential treatment offers one perspective on how instruction, management, assessment and sociocultural contexts influence student learning and how students make sense of their classroom experiences.

The Role of Teacher Expectations in Teachers' Beliefs About Learning and Motivation

For almost 40 years, research has demonstrated that teachers have different expectations for and provide differential treatment to students based on visible, behavioral evidence such as race, gender, achievement level, and social class. Teacher expectations are inferences that teachers make about the future behavior or academic achievement of their students based on what they know about these students at the time (Brophy, 1998; Good, 1987). This research literature illustrates that people believe what they "see." Once formed, beliefs are difficult to change (Pajares, 1992). Sociologist Robert Merton named this phenomenon the "self fulfilling prophecy." He warned, "The specious validity of the self-fulfilling prophecy perpetuates a reign of error. For the prophet will cite the actual course of events as proof that he was right from the very beginning" (Merton, 1948, p. 195).

Nevertheless, many researchers have concluded that the majority of teachers base expectations on "objective" evidence such as achievement test scores, rather than stereotype or bias, and are able to adjust their expectations and instructional practices as students' performance changes. In a review of teacher expectations research, Brophy (1983) estimated that only 5–10% of the variance in student performance is attributable to teachers' differential treatment and expectations of students. Furthermore, some argue that differential treatment can provide benefits (such as adjusting to individual differences), and that teacher expectancy is not automatically self-fulfilling, because, for example, some students resist (Brophy & Good, 1970; Gregory, 2004).

Weinstein (2002) argued, however, that "expectancy effects in schooling have been largely misunderstood and underestimated," masking their great potential for harm (p. 7).

Sadly, our system of education is largely built upon beliefs and practices on the negative side – about differences in and limits to ability. Our expectations of ability are too low, too narrowly construed, too bound to time and speed, and too differentiated (high for some, low for others) by social status factors that are irrelevant to the potential to learn. So too are our educational methods narrowly conceived. Guided largely by repetition rather than compensatory and enriched methods, our teaching strategies minimize effort, fail to overcome blocks in learning, and limit what can be learned (p. 1).

Taking an ecological perspective, Weinstein, (2002) noted that expectancy effects have been minimized because they have been based on brief teacher-student interactions or momentary measures of beliefs rather than on the cumulative consequences of "entrenched beliefs about ability" over the course of a school career, beliefs that are reinforced many times over by "institutional arrangements in the classroom, school,
family, and society (p. 7). She further claimed that expectancy research has ignored the insights of children, the recipients of expectations. For example, Weinstein and Middlestadt (1979) reported that students were aware that some teachers denied help to low achievers and collected work before students could finish it. Children reported that high achievers are given more opportunities for leadership and choice whereas the work of low achievers is more controlled, structured, and criticized. Kuklinski and Weinstein (2001) found that in the early grades, teacher expectations directly influenced achievement (through different opportunities to learn), but by fifth grade, teacher expectancies were mediated by children's expectations, indicating that older students had internalized the expectations communicated.

Teachers' beliefs in the stability or malleability of intelligence appears to be one predictor of their instructional practices (Weinstein, 2002). Those who view ability as innate and normally distributed tend to use practices that foster differential achievement, such as ability based curricula and grouping, competition, and public rewards and punishments. Those who believe that ability is malleable are more likely to use fluid and cooperative groups, divergent tasks (with many "correct" approaches) and challenging curriculum for all. Such practices tend to accord "ability" to all, rather than to a select few.

Expectancy also influences peer relations and conduct in school. Donohue, Perry, and Weinstein (2003) found that first grade classrooms with fewer learner-centered practices had greater rates of peer rejection in spring (controlling for differences at entry). In high school, Gregory (2004) reported that students were more defiant and uncooperative when they perceived teachers as unfair and uncaring. Finally, studies of stereotype threat – a perception that one's group is assumed to perform poorly on academic tests – show that minorities do underperform on tests when their race is made salient. Such perceptions can emerge as early as third grade. When students' perceptions of stereotype and teacher expectations co-occur, as they often do, minority students are at increased risk (Weinstein, Gregory, & Strambler, 2004). In such cases, students may become disaffected and devalue academics, leading to decreased achievement and possible school dropout.

In summary, teacher expectations and differential treatment are one example of how teacher beliefs about learning and motivation influence student outcomes. Research has demonstrated that even young children can detect and report differential treatment and that by late elementary school, such beliefs have been internalized by children, possibly becoming self-fulfilling prophecies. Beliefs about the stability or malleability of ability as well as stereotypes based on race, SES and gender may be the most damaging for student outcomes. Given the research on teacher expectations, it is also important to consider how teacher beliefs change, because high expectations foster achievement, effort, persistence and resilience in students.

Teachers' Beliefs and Instructional Change

As research on teacher beliefs shows, many teachers adopt a "transmission" approach to teaching and an "absorptionist," passive view of learning (Prawat, 1992, p. 356), which are less likely to promote student understanding and intrinsic motivation.

Moreover, the contexts within which instructional decisions are made often advance transmission over learning, even when teachers advocate constructivist principles. Windshitl (2002) analyzed "dilemmas," or "aspects of teachers' intellectual and lived experiences that prevent theoretical ideas of constructivism from being realized in practice in school settings" (p. 132). He identified four types of dilemmas for teachers that influence their beliefs and practices: (a) conceptual dilemmas – attempts to understand the psychological, epistemological and philosophical basis of the ideas and accommodating these with current beliefs; (b) pedagogical dilemmas – the complexities of designing curricula and teaching this way; (c) cultural dilemmas – the reorientation of roles and expectations among students and teachers; and (d) political dilemmas – resistance from community stakeholders when privileges and norms are changed. These dilemmas also take into consideration the notion that teacher beliefs are strongly held and hard to change. Those acquired earlier may be most resistant to revision.

As Pajares (1992) noted, teachers have been forming beliefs about teaching and learning for years, based on their experiences as students, and their beliefs are well established by college. As "insiders" teachers frequently defend the status quo, even in cases of inequity, using their images of "teaching" to filter new information and maintain beliefs. For example, Thompson (1992) asserted that teachers' beliefs about good mathematics teaching are so well-formed that they are unlikely to be changed by external conditions such as curriculum reform or new teaching materials. If teachers are required to change, they may adapt to the new curriculum by re-interpreting their traditional teaching or incorporating some of the new ideas into the old style of teaching (Cohen, 1990). Researchers have examined conditions of teacher conceptual change, although there is no clear agreement on the process. Guskey (1986) suggested that change in practice, fostered in staff development, precedes change in beliefs. Richardson (1990) proposed that changes in beliefs and practice are reciprocal, and that either can initiate change. Other research has suggested that beliefs can change only when an individual is dissatisfied with existing beliefs and is presented with a plausible alternative (Pajares, 1992) or when options for change represent challenges, rather than threats, to teachers (Gregoire, 2003).

An Illustration of Teacher Belief Change

The results of a collaborative project with middle school mathematics teachers provide examples of these change trajectories (Turner & Christensen, 2007; Turner, Warzon, & Christensen, 2008). Six teachers from a low SES, ethnically diverse school in the Midwestern United States met monthly over the school year with a university researcher to learn and implement principles of motivation in their instruction. During the meetings teachers discussed their integration of motivational strategies and instruction and supported each others' efforts by offering suggestions. In the process, most teachers deepened understanding of the principles and why they worked.

One teacher in particular exemplified the process of change in beliefs and practice. She altered her views of mathematics curriculum and instruction, and their connection to student learning. Initially, she expressed beliefs that accuracy and speed were markers of student competence, that students could not originate mathematical ideas and thus needed didactic instruction to learn, that students were not interested in math, and that ability was stable. At the same time, she expressed dissatisfaction with the results of her current, procedural teaching practices, but was unsure how to implement interactive and idea-based instruction in mathematics. She believed that mathematics was "not an enjoyable subject necessarily" and was skeptical that group activities and student-led discussions could lead to meaningful learning. She also believed that these types of "creative activities" posed a potential "risk" in that the time and effort involved in their implementation did not guarantee success on standardized tests.

Teacher: And that's what's hard, as a control freak like I am to handle because at some point you're sitting in the back and you're realizing, man they're getting a big kick out of whoever is up there [student leading class discussion] ... sometimes I feel like maybe the math is lost in that and so I don't know if it's worth the time spent [on student-led discussion] ... Because I think I have done that in the past and I always get to the point where I'm like, 'Ok, I've got to take control again because we're not learning anything.' And that's a fault of mine. I realize that that's *my* problem, not *their* problem; but I think that maybe I need to be able to see more clearly that there is learning going on, that it's not just kind of a down [off task] time.

Despite her characterization of herself as a "control freak," as she learned and understood the principles of motivation, she began to implement competence- and autonomy-fostering strategies that emphasized student control. Eventually she said that the students were "doing as much teaching, if not more, than [she was] most of the time." She encouraged her students to "act like a teacher" and to "justify and defend" their thinking when discussing and presenting their work. As a result, participation, effort, and conceptual understanding increased in her classroom.

As she continued to experience success with the new strategies, her instruction focused on conceptual understanding instead of just executing procedures, and provided opportunities for students to work together to construct meaning. She expressed that the time and effort involved in designing this type of instruction was "worth the risk" because it resulted in greater learning, understanding, and enjoyment for the students.

Teacher: ... considering the amount of time we spent laying the [conceptual] framework, I think we're getting through things more quickly now—so we'll sort of make up maybe for some lost time. And I'm trying to not think about lost time anymore because it's *not* lost time.

By spring she was able to understand that the principles of motivation worked together to foster learning and engagement in the classroom. She demonstrated this understanding not only in her classroom, but also in the teacher meetings by offering other teachers helpful suggestions and challenging their misconceptions. Thus, by changing her beliefs and practices, she began contributing to the change process of the other participants as well.

Although this teacher demonstrated a clear pattern of belief change, it was not smooth. During this process, recurring dilemmas, including the strong emphasis on test scores in the school district and lack of support from administrators, discouraged teachers and prompted them to navigate an inconsistent course between old and new practices. For example, as quarterly assessments approached, teachers tended to abandon attempts to foster understanding and to fall back on earlier beliefs that "covering" material would enable students to answer a few more items correctly on the test. Thus contextual features challenged changes in beliefs and practices, and consistently introduced impediments to such changes, despite teachers' recognition that changes in instructional practices fostered student motivation and learning.

We believe that the most powerful incentive to change beliefs and practices came from the students' responses to the new instructional practices fostered in the collaboration. Teachers were motivated by their students' deeper content learning and engagement. In order to set these events in motion, however, teachers had to be willing to take the challenge of changing instructional practices and had to have sufficient self-efficacy to endure setbacks and to solve problems (e.g., Gregoire, 2003). In addition, the research-based principles of motivation and instructional strategies provided a strong explanatory mechanism for teachers. These principles countered teachers' naïve theories of learning and instruction and took the "mystery" out of successful instruction. The principles also linked motivation and instruction (both "hands on") rather than separating them.

Future Directions: Examining Teacher Beliefs in Context

As the previous research example illustrates, teachers' beliefs about student learning and motivation are multifaceted – focused on curriculum, pedagogy, and student understanding and engagement. The complexity of teachers' beliefs, however, is forged not only in the social contexts of classrooms, but also in the school and community. For example, Western notions of ability are that it is stable and innate (Plaut & Markus, 2005). Therefore, because teacher beliefs are socially constructed and sustained, we suggest that researchers should consider multiple contexts if we are to understand how teacher beliefs evolve, are communicated through practice, and change (Turner & Meyer, 2000). In an attempt to look forward, we re-examine some of the basic premises regarding teachers' beliefs about student learning and motivation.

One of the primary ways in which teacher beliefs must be understood is with respect to the immediate classroom environment, what we have called the "instructional context" (Turner & Meyer, 2000). To adapt to the complexity of classrooms, it appears that teachers tend to monitor "class understanding" rather than that of individuals, and to focus on implementing the activity or adjusting it to the students (Calderhead, 1996). As we discussed previously, Prawat (1992) stated that teachers

tend to see both students and curriculum as fixed or stable, and thus focus on delivery (e.g., pace, style) rather than on appropriate content or meaning-making. If the researcher's focus is on individual students, this seems to be an apt conclusion, but if the focus is shifted to the level of the whole class, then the argument seems inappropriate. For example, Bromme (1987) asked teachers immediately after a lesson to recall student progress or problems. Student contributions were remembered when they had "strategic value," when the class was "stuck" or when a transition from old to new knowledge was occurring. They served to alert the teacher to problems of the "collective student," or class as a whole. In essence, teacher beliefs appear to guide classroom-level scaffolding as indicators of student learning and motivation (Turner et al., 2002).

Second, conflicting research findings on teacher beliefs have been revealed regarding the congruence between teachers' stated beliefs and their classroom practices. Thompson (1992) hypothesized that such discrepancies could originate from internal or external sources and argued that the inconsistencies in the findings reveal that there is not a cause and effect relationship between beliefs and practice. A social contextual perspective suggests that, as Richardson (1990) argued, the relationship between teacher beliefs and practice are interdependent one does not change without the other. Moreover, these beliefs and practices are embedded in different layers of context. Most researchers are investigating the most immediate classroom context. However, to inquire about a teacher's belief change or to relate a belief to a particular classroom practice, or the lack of one, is more meaningful when multiple contexts are involved as part of the analysis. For example, the teachers in the research study described previously on belief change often altered practice, regardless of beliefs, as high stakes testing approached. In this case a broader contextual influence explained the apparent discrepancy, which was only short-term.

In summary, teacher beliefs about student learning and motivation are most meaningful when examined as a system of beliefs across various contexts. If teacher beliefs are social constructs, we should not be surprised when they appear incongruent across contexts. When teachers are working in conditions that support their beliefs, they may appear consistent. However, teachers may appear to adopt other, seemingly contradictory beliefs, in response to institutional and political pressures. By contextualizing teacher beliefs and practices, we can better understand the salient features of the various contexts and how demands at different levels are negotiated successfully. Furthermore, the ability to describe how teacher beliefs develop, the congruencies between beliefs and practice, and the difficulties in changing beliefs may make these processes more predictable, making this research more applicable for supporting teacher development at more than one level and in more than one way (Ingram, Louis, & Schroeder, 2004).

By considering the teacher beliefs as socially constructed across contexts, researchers and educators can begin to re-conceptualize these things called "beliefs." For just as teachers have been beleaguered for delivering the curriculum and expecting students to do the learning, researchers have held teachers as solely responsible for their beliefs and practices. Prawat (1992) exhorts teachers to be willing to rethink their views on issues of teaching and learning, but notes

that this is unlikely without a complete restructuring of the workplace. As Windshitl (2002) has noted, teacher beliefs are developed and maintained through participation in the conceptual, pedagogical, cultural and political affordances and constraints of their situations. Thus, a contextualized view may offer more promise for both the study of teacher beliefs about learning and motivation, and their conceptual change.

Biographical Notes

Julianne Turner is in the Psychology Dept. at the University of Notre Dame. She does research on classroom contexts for motivation and learning, especially in mathematics. She is interested in methodological approaches that capture the situated, dynamic nature of motivation and learning.

Debra Meyer is a Professor of Education at Elmhurst College. Her interests include classroom motivation and teacher emotions.

Andrea Christensen is a doctoral student in her third year of the Developmental Psychology program at the University of Notre Dame. She is interested in low achieving students, particularly which aspects of the classroom context (i.e. teacher practices, classroom norms, social climate) contribute to improvements in the motivation and achievement of these students.

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TEACHERS AND THE POLITICS OF HISTORY SCHOOL TEXTBOOKS

Joseph Zajda

History, Ideology and the Nation-Building Process

The main aim of this chapter is provide a new insight into understanding the nexus between ideology, the state, and nation-building – as depicted in history school textbooks. It especially focuses on the interpretation of social and political change, significant events, looking for possible new biases and omissions, leadership and the contribution of key individuals, and continuities. Nation-building architects make extensive use of history to promote those historical narratives that embody the politically correct teleology of the state (Anderson, 1991; Smith, 2001). It has been suggested that the historiographies of the new states in Eastern Europe (with parallels in the Russian Federation and China), engaging in nation-building process, continue to be essentially 'monolithic and intolerant to alternative views as those of their communist predecessors, merely exchanging a communist ideological colouring for a national one' (Janmaat & Vickers, 2007, p. 270). Janmaat argues that the new post-Soviet government in the Ukraine was only too ready to use history education to promote a new sense of nationhood, which would maximise Ukrainian distinctiveness and its cultural significance in the former Soviet Union.

The Council of Europe History Textbooks Projects

International research on school history has been done by the UN, the Council of Europe (Nicholls, 2006, p. 8). The Council of Europe has played a major role in funding projects to improve teaching history and history textbooks in Europe, particularly in the Russian Federation between 1999 and 2003. Its latest publication is *History Education in Europe: Ten Years of Cooperation between the Russian Federation and the Council of Europe* (2006). The Council of Europe's major 3-year project (1999–2001) *Learning and Teaching about History of Europe in the 20th Century* (2001) culminated in the final report *The 20th Century: an Interplay of Views* (2001). Among its recommendations on the teaching history in twenty-first century Europe we find the following principles:

the need for 'stronger mutual understanding and confidence between peoples, particularly through a history teaching syllabus intended to eliminate prejudice and emphasising positive mutual influence between different countries, religions and ideas in the historical development of Europe';

reaffirming 'the educational and cultural dimensions of the major challenges in the Europe of tomorrow';

stressing that 'ideological falsification and manipulation of history are incompatible with the fundamental principles of the Council of Europe as defined in its Statute'. (Council of Europe, 2001)

It warned against the 'misuse of history', and declaring that history teaching should not be 'an instrument of ideological manipulation, of propaganda or used for the promotion of intolerant and ultra-nationalistic, xenophobic, racist or anti-Semitic ideas'. The Council of Europe had also offered specific recommendations for history textbooks' content, to ensure that they reflected the spirit of pluralist democracy, human rights, and promoting the values of freedom, peace and tolerance. Hence the history syllabus content had to reflect the European dimension, through the following goals:

- awareness-raising about the European dimension, taken into account when syllabuses are drawn up, so as to instill in pupils a 'European awareness' open to the rest of the world;
- development of students' critical faculties, ability to think for themselves, objectivity and resistance to being manipulated;
- the events and moments that have left their mark on the history of Europe as such, studied at local, national, European and global levels, approached through particularly significant periods and facts;
- the study of every dimension of European history, not just political, but also economic, social and cultural;
- development of curiosity and the spirit of enquiry, in particular through the use of discovery methods in the study of the heritage, an area which brings out intercultural influences;
- the elimination of prejudice and stereotypes, through the highlighting in history syllabuses of positive mutual influences between different countries, religions and schools of thought over the period of Europe's historical development;
- critical study of misuses of history, whether these stem from denials of historical facts, falsification, omission, ignorance or re-appropriation to ideological ends;
- study of controversial issues through the taking into account of the different facts, opinions and viewpoints, as well as through a search for the truth.

One of the special goals of this 3-year project was to produce teaching resources for secondary schools which would encourage both teachers and students to approach historical events of the twentieth century from a critical and analytical perspective, using the same skills and assessment criteria as historians. Both reports emphasise that no single version of history should be considered as final or correct, and encourage critical thinking and diverse approaches to learning and teaching history (Zajda, 2007a, p. 292). The reports also stressed

- · the role of historical interpretation and memory in forming identity, and
- history dominated by prejudice and myth.

As a result, there has been a degree of 'Europeanization' of history textbooks in EU member states, since the 1990s (Han, 2007, p. 392). The new generation of Russian, French, German, and the Ukrainian history textbooks contain a manifest European dimension, as well as increased emphasis on 'wider European ideals', such as democracy, human rights and social justice (Han, 2007, p. 393). A vivid example of this 'Europeanization' is the case of the Ukraine. From 1996, onwards the Council of Europe, together with the Ministry of Education held a series of seminars that aimed to reform the teaching of history, urging textbook writers to write textbooks that reflect the EU ideals of cultural diversity, social justice, and inclusive pedagogy. The multiple-perspective approach to historical narratives, advocated by the Council of Europe, resulted in the introduction of the new standard in teaching History of Ukraine in the restructured 12-year school system (Janmaat, 2007, p. 320). It mentions the cultivation of tolerance and respect for other nations, and the importance of critical thinking. However, as Janmaat, notes, there are signs that the rhetoric of the reform policy is not 'filtering down' into the textbooks. The 2005 new history curriculum for Year 5, as before, presents a strictly linear and chronological Grand Narrative of Ukrainian history, continuing myth-making of past historical events, which is at odds with critical thinking and pluralist discourses. A new textbook for Grade 10, by Komarov et al. (2004) on Ukrainian history, produced in cooperation with Euroclio, and international organisation of history teachers, reflects western models of innovative pedagogies, grounded in pluralist discourses, multiculturalism and social justice.

The Politics Surrounding Historical Narratives

Continuing global public and political debates about the role of historical explanation and the development of historical consciousness in schools when dealing with popular understandings of a nation's growth, has given history a significant role in re-positioning competing and ideologically-driven discourses of historical narratives and processes (Janmaat, 2007; Kaplan, 2007; Macintyre & Clark, 2003; Manne, 2003; Nicholls, 2006; Taylor, 2006; Zajda 2007a). Taylor and Young (2003), referring to the role of historical explanation and the development of historical consciousness with respect to a nation's growth, argue, that the main issues are – national identity, and balanced representations of the past. In Russia for instance, as in other countries undergoing a similar process of nation-building, the three most significant issues defining the re-positioning of the politically correct historical narratives are: preferred images of the past, reminiscent of Anderson's (1991) 'imagined community'; patriotism and national identity.

Current debates, around the main issues in historiography and the role of historical narratives in the nation-building process, echo similar controversies in the UK in the 1980s (Phillips, 1998) in the USA during the 1990s (Nash, Crabtree, & Dunn, 2000), as well as recent debates in Japan, Canada, Germany, France, Italy, Greece, the Ukraine,

Korea, China, and the Russian Federation. In the USA, for example, on January 18, 1995, the 'History Wars' erupted on the floors of the United States Congress. In a debate on national history standards, Senator Slade Gordon (R-Washington) asked the question "George Washington or Bart Simpson – which figure represented a more important part of our Nation's history for our children to study"? He attempted to define the national character of history teaching for future generations (Stearns, Seixas, & Wineburg, 2000, p. 1).

School history texts, as instruments ideological transformation, and nation-building, are currently closely monitored by the state, in counties like Japan, China, the Russian Federation, and Greece, to name a few. In other countries, these processes are still present but in less formal and more ad hoc ways. In the Russian Federation, for example, it represents an ideologically driven nation-building process, and social and political transformation of society, which was overseen by the Putin government until 2007, and which continues today.

Historical Perspectives on School History Textbooks

Historical perspectives on school history textbooks include a rich diversity of ideological orientations, ranging from ultra-conservative to neo-Marxist perspectives. The growth of recent nationalist and neo-nationalist, as well as socialist movements, especially in Europe, and some parts of Latin America, influence, to a certain degree, the content and the role of history textbooks in schools. Debates over the content and the role of history textbooks, as Nicholls (2006) observes, have become 'increasingly contentious' (Nicholls, 2006, p. 43). Some scholars and educationalists suggest that school history textbooks play a significant role in political socialisation, promoting patriotism and the nation-building process (Baques, 2006; Han, 2007; Hein & Selden, 2000; Janmaat, 2007; Pingel, 2006; Zajda, 2007a). Some even argue that history textbooks are central to the 'transmission of national values ... in that they present an official story highlighting narratives that shape contemporary patriotism' (Hein & Selden, 2000, pp. 3-4). If this is the case, history textbooks may well have acquired a new degree of political and moral dimensions in the twenty-first century. This is turn suggest the political dimension in education, embracing the curriculum, classroom pedagogy, assessment and educational outcomes. As Ginsburg and Lindsay (1995, p. 8) argue, teacher education involves 'socialisation for the political roles that teachers play'. Thus teachers become agents of political socialisation, via disciplines they teach. Political socialisation deals with explanations of political events, and refers to the 'behaviour, knowledge, values, and beliefs' of the citizens (Dawson & Prewitt, 1969, p. 5). Also, it important to clarify that the political dimension is not limited to the discourses surrounding 'the state, governments, parties, constitutions and voting' (Ginsburg & Lindsay, 1995, p. 4). It extends to all aspects of society, and individuals, ranging from global trade policies to interpersonal dynamics and inter-cultural communication (Corr & Jamieson, 1990; Foucault, 1980; Zajda, 2005, 2007b).

Textbooks, Historical Events and the Truth

In some countries, history textbooks have become of source of on-going heated debates and controversies, due to their depiction, or 'air-brushing' of specific historical events. According to Nicholls (2006), Japanese history textbooks "appear to be more controversial than those of other countries". This is largely due to the fact that the Japanese government directly monitors, supervises and censors textbook content (Nicholls, 2006, p. 44). Similar degree of government's control over the content of history textbooks can be observed in the Russian Federation, the Ukraine, Greece, China, and elsewhere. In Japan, for instance, some ultraconservative historians, like Fujioka (1997) and Nishio (1999) felt that history textbooks over-emphasised Japanese imperialism and wartime atrocities (see Ogawa & Field, 2006, p. 52). They published their own textbooks - History not Taught in Textbooks, and The History of the Nation's People, justifying Japan's role in World War II, as one of liberating Asia from Western imperialism. The books became best-selling books in Japan. The Japanese Society for History Textbook Reform circulated its draft of the proposed history textbook for junior high schools - New Japanese History (2000). Again, widespread protests erupted in Japan, China and South Korea, over the presentation of Japan's foundation myth as historical fact, and its interpretation of Japan's role in wars to 'liberate Asia from the Western powers' (Masalski, 2001, p. 2), and not 'wars from expansionist motives' (Nicholls, 2006, p. 53). The Ministry of Education, following the publicity and controversy over the ultra-conservative historical perspectives, its biases and omissions, criticised such textbooks for containing unbalanced accounts of certain historical narratives and requested that revised textbooks should reflect a more balanced content, a more sensitive use of language (e.g. 'military comfort women' etc.), and a more balanced and objective use of critical analysis, and evaluation. However, the swing towards patriotism, nationalism and traditions, promoted by ultra right-wing historians, and policy-makers, has gained the momentum since 2001. A moral education reader A Record of My Inner Development, designed to cultivate a 'love for the nation' and patriotism was published in April 2002 and distributed by the government to 12 million junior and senior high school students. In their school report cards, students are graded on a three-point scale as to their 'patriotic attitude' and 'awareness as Japanese' (Nicholls, 2006, p. 55).

In Greece, similar tensions and anxieties are reflected in the representations and continuities of national identity in school history textbooks. The Greek education system, like those in the Russian Federation, France, Japan, China and elsewhere, is centralised in nature. The government has complete control over the content of the school textbooks:

It funds their writing, appoints its authors and publishers and distributes the textbooks, free of charge, to all public schools each year. The successive governments during the two significant periods, 1970–1974 and 1997–2005 have attempted to define or re-defined national identity in light of globalisation, wherein globalisation had its most dramatic impact on socio-political

change in Greece and on revisions to school textbooks themselves. (Meselidis, 2007, p. 8)

Greece has been profoundly influenced by Western models of pluralism, multiculturalism, secularism and tolerance, which are attempting to change Greek ethnocentrism. This, according to Meselidis, has forced Greece to undergo a dramatic social and cultural transformation, and to re-invent itself and its national identity, to some extent, in order to meet these demands:

... in Greece education has been used as a key weapon to transform national identity, in order to create more competitive, productive and entrepreneurial personalities, while still preserving Greek cultural and historical heritage. (Meselidis, 2007, p. 9)

In Greece, this has meant changing and revising the school history curricula at regular intervals, since 1970. The Year 5 and Year 6 Primary School History textbooks, like other history textbooks, had been revised a number of times, by new successive governments since the 1970s. In 1997, the Year 5 textbook was revised again in the aftermath of the reformist and pro-globalisation Prime Minister, Costas Simitis coming to power in 1996. In Greece, although the government has an overpowering control over curricula in Greece, there are other vested interest groups that lobby it for influence on the educational syllabus, especially the Church:

As church and state are not separated in Greece, and Article 3 of the Constitution guarantees this union, successive Church leaders have wanted a say in the content of the textbooks. The current Head of the Church of Greece, Archbishop Christodoulos' public vocal criticism of aspects of globalisation, as threatening Greek identity ... Church leaders, such as Christodoulos, were outraged when religious affiliation was dropped from Greece's new national ID card, in accordance with European Union standard practice. (Meselidis, 2007, p. 10)

A new Year 6 Primary School history textbook was introduced in the 2006–2007 school year. Its contents included an examination of the history of Greece from the 1400s until 1981. It addressed the rule of the Ottoman Empire over Greece, the Greek war of Independence (1821–1827) against the Ottoman Empire and the history of the new Greek state post 1827 until the present, with special concluding emphasis on Greece's admission to the European Economic Community in 1981 (Meselidis, 2008). The authors of the textbook, in their eagerness to represent Greece's Ottoman experience in a more reconciliatory ways, made some incredible distortions of historical events involving Greco–Turkish history. One of the glaring 'errors' was the textbook's omission of the carnage against the Greek and Christian civilian population, in Smyrna on the 27th August 1922, when victorious Turkish forces entered the city, having defeated the Greek army. Meselidis argues that a new and softer narrative of this tragic event was a deliberate attempt to minimise this historical fact and repress from memory this unnecessary war-related genocide. The omission of the atrocities

against Greek and Christian civilians in Smyrna, in 1922, by the Turks, as Meselidis shows, essentially undermined the authors' claim to objectivity. It exposed the textbook to criticism of being a 'biased', and ideologically driven historical narrative:

Most independent historians agree that what followed was a massacre of the Greek people of that city by the Turks. However, the textbook only described the tragedy of August 1922 event with the following misleading statement: "On the 27th August 1922, a Turkish army enters Smyrna. Thousands of Greeks crowd at the harbour to enter the ships and leave for Greece". (Meselidis, 2008, p. 8)

The content of the textbook, particularly its misleading representations of certain events, and interpretations of political, social and religious dimensions that shaped and influenced historical processes in Greece, contributed towards a political crisis within the state. Many teachers simply refused to teach the contents of the book. Finally, due to heated public debate and controversy, the government was forced to withdraw the book in September 2007, and replace it with the old 1986–2006 textbook to be used during the 2007–2008 school year, until a completely new textbook would be commissioned and written for 2008–2009 (Stylianidis, 2007).

What can we learn from this example, when the state and the Ministry of Education had to withdraw a school history textbook from schools? Firstly, it is almost impossible to fabricate history in a democratic state. Such a problem would not have existed in totalitarian states like the USSR, Nazi Germany and the Imperial Japan during the 1930s. Secondly, public opinion, and external actors do make a difference. In this case, parents, teachers and community and religious leaders collectively voiced their opposition to a textbook and it contested representation and discussion of certain events. Thirdly, the state needs to consider the dialectic between cultural diversity, human rights, identity and the truth. As Meselidis (2008) argues, modern Greek identity has a 'deeper cultural spirit, in time and place, to some extent, than modernist nationalist theory' might suggest. Public controversy and politicisation of the debate surrounding this particular history textbook, revealed that 'a top down' attempt by the state, to 're-invent' or 'manufacture' a new national identity, by means of a politically correct historical narrative, in order to meet the challenges of modernity, is not always successful:

If the 2006/2007 textbook was a government attempt to construct a new Greek national identity, by undermining the Church and the Us and Other dichotomy of the Greek in-group and Turkish out-group mentality, then it failed, at least temporarily, with the permanent withdrawal of the book. (Meselidis, 2008, p. 9)

The above discussed cases of the politicisation of an increasingly state-controlled history curricula and textbooks, which has gained the momentum since 2007, with a corresponding pendulum swing towards patriotism, nationalism and traditions, promoted by politically-correct textbook authors, and policy-makers alike, demonstrate

increasingly political and economic dimensions of nation-building in the current history curricula and history textbooks (see also Anderson, 1991; Smith, 1998, 2001).

Ideology, the State and School History Textbooks

The Two Historical Narratives as One History

When West Germany and German Democratic Republic (GDR) were reunited in October 1990, history textbooks had to re-written. The parallel development of two dominant narratives in history textbooks was problematic. Was it possible to have two or more dominant narratives in German textbooks? More specifically, the question was: 'Do we need or do we want a modern, new all-German theory for the teaching of history or can and should the old West German approach simply be implemented in East Germany without any changes?' (cited in Pingel, 2006, p. 76). It became clear from numerous debates and publications that it was not possible to identify a new 'post-GDR theory' or an innovative 'all-German theory' (Pingel, 2006, p. 76).

The Russian Federation is a vivid and unique example of ideological repositioning of historical narratives, blending certain Soviet and Russian historiography. The new textbooks portray a post-Soviet, national identity, thus signalling a radical ideological transformation, from Soviet to Russian pluralist democracy, and redefinition of what are seen a 'legitimate' culture and values in Russia. New school history textbooks particularly set out to overturn the Soviet emphasis on orthodoxy in historical interpretation, by encouraging a critical consciousness among in students. They do this by approaching history from a multiple perspectives and inviting students to confront certain periods in the country's past in a questioning and analytical manner (for other discussions of post-Soviet educational reform in Russia, see Kaufinan, 1994; McLean and Voskresenskaia, 1992; Polyzoi & Nazarenko, 2004; Kaplan (2005); Zajda, 1998, 1999, 2003, 2005). In the textbooks, pluralism, and critical awareness have replaced Marxism-Leninism as the new dominant discourse.

Despite the above ideological and pedagogical changes, history textbooks, as in the past, continue to promote the spirit of patriotism, and nationalism, in depicting the evolution of Russian national and cultural identity. For instance, in the afterward and conclusion of the Grade 8 textbooks (Danilov & Kosulina, 2000; Rybakov & Preobrazhenski, 1993) students are reminded that history is about patriotism and citizenship, and that Russia became a 'great nation in the world':

... To treasure ... this heritage—means to cultivate within oneself the love of *Rodina* (Motherland), the feelings of patriotism, and citizenship. (Rybakov & Preobrazhenski, 1993, p. 273)

XIX century finally created Russia into a great nation in the world ... This was achieved through our people's sufferings and won by a complete defeat [of

Napoleon] in the 1812 war ... Not a single issue of the world's politics could be decided without Russia. (Danilov & Kosulina, 2000, p. 253)

There is also an attempt to teach feeling and emotions, and the love of one's country in the study of history in school textbooks. This is clearly defined in the foreword of the newest Grades 6–7 textbook by Preobrazhenski and Rybakov (2001) *Istoriia Otechestva* (History of the Fatherland, seventh edition). Here, Russia's 12-yearolds study historical narratives, maps and charts to learn about the greatness of the Russian state and its imperial past:

Knowing the history of one's *Rodina* (Motherland) is important for every human being. History is correctly called the people's memory and the teacher of life ... The most important thing in the study of history of one's Motherland—is learning to love her ... means to love the country, the geographic space where a person was born. (Preobrazhenski & Rybakov, 2001, pp. 5–6)

One of the goals of teaching history in schools continues to reflect values education and patriotic upbringing, in this case, through the study of WW2. It is 'mainly through the study of *Velikoi Otechestevennoi voiny* (the Great Fatherland's War) that civic and patriotic upbringing is achieved' (Lebedkov, 2004, p. 1). Due to problems surrounding a politically correct and preferred portrayal of certain historical narratives and events, President Putin (2003) had directed the Russian Academy of Science to examine all history textbooks used in schools throughout Russia. 'Numerous' complaints of WW2 veterans served as a basis for the President's letter. Putin wrote:

I fully share opinions and feeling of all the veterans of the WWII. I am authorizing historians and scholars to examine today's history textbooks. They should be able to report their results to me by February 1, 2004. (http://english.pravda. ru/printed.html?news_id = 11904)

This was as a result of a major history textbook scandal involving the 2002 edition of Igor Dolutsky's (2002) *National History: 20th Century* for Grade 10. Students were asked to discuss whether Putin's style of leadership could be considered as an 'authoritarian dictatorship', and whether Russia had become a 'police state' (p. 351). Dolutsky's textbook emphasised crimes, and abuses of the Soviet state committed against millions of its own citizens. Putin's reaction was that Russian history was full of dark spots, but one should not dwell on them, but focus on the bright spots, and some of the great achievements of the nation. Hence, according to him, school history textbooks should depict historical facts:

... that they should inculcate a feeling of pride for one's country ... We should be happy that we departed from a one-party system and a mono-ideological perception of history ... We must not allow ourselves to fall into another extreme. (http://www.edu.ru/index.php?page_id = 5&topic_id = 3&date = &sid = 471) Dolutsky's textbook was stripped of its Education Ministry license in November 2003, just days before the December parliamentary elections. Consequently, due to government's pressure, some final year history textbooks were even pulped as they portrayed an unfavourable image – huge losses and prisoners of war taken of the Soviet army during the early period of WW2, particularly during the darkest days of World War II for the Soviet Union, when many Soviet armies were either defeated, annihilated or captured (Zajda, 2003, pp. 370–371).

Since then, the Ministry of Education decreed that, in view of new state standards in education, all history textbooks had to be examined and evaluated by panel of experts, including the Federal Experts Council on History, the Academy of Sciences, and the Academy of Education. Approved textbooks would be selected on competitive basis and included on the approved list of prescribed textbooks issued by the Ministry of Education. By 2004, the new history textbooks have returned to traditional symbols of nation-building and patriotism. In the *History of Russia and the World in the 20th Century* textbook by Zagladin (2004) for Grade 10, photos on the cover carry Soviet propaganda images: Moscow's soaring 'Worker and Collective Farm Girl' statue, a poster reading 'The Motherland is calling' and the Soyuz-Apollo space docking. They tell students the Soviet past was all pride and glory.

Some Russian scholars have examined structural forces and processes exerted by the state and other major stakeholders in defining a 'new direction for history education' (Erokhina & Shevyrev, 2006, p. 11). They illuminate further the complex, and ideologically and culturally saturated landscape of Russian school textbooks, which is grounded in a new approach to comparative historiography and contextspecific processes. In Israel, Vera Kaplan (1999) in her study of Russian school textbooks notes that they pay little attention to the Soviet repressions and mass deportations of ethnic groups. Furthermore, many Russians do not want to know of the Red Army's wartime atrocities and about complete indifference to human life by the Soviet high command.

Given that the students are exposed to so many heroes and role models – from Aleksandr Nevsky (who defeated the Swedes in 1240), to Vladimir Putin, which values are they to internalise on their journey of discovering democracy and citizenship in the Russian Federation in the twenty-first Century? Russia is not alone in discovering a moral vacuum, and the current absence of a sense of cohesion or a sense of belonging to the civic culture. Similar discoveries have been made in other societies (Torney-Putra, Schwille, & Amadeo, 1999, p. 14). In general, school history textbooks continue to emphasise the historical greatness of the Russian State – from the ancient *Rus*, the Imperial Russia, to the Soviet Union, as a super power, during the period between 1950s and 1980s. Added to this nostalgia for the past is the new concern for teaching the concepts of participatory democracy, active citizenship, human rights, and social justice, never experienced by the ex-Soviet citizens. There is need for a new hybrid of national identity, and patriotism, as Russia has yet to become a 'real nation state' (Bogolubov et al., 1999, p. 532).

New school textbooks in history have become a major symbol for inculcating a new sense of national identity and patriotism in Russia between after 2003. This is supported by Russian President Vladimir Putin's policy directive in 2003 on school

history textbooks that 'Textbooks should provide historical facts, and they must cultivate a sense of pride among youth in their history and their nation' (Danilova, 2004).

Danilevskoi (2005) argues that teaching history in schools is not just to do with changing ideologies, but the fact that new school history textbooks cover a great deal of new data, where every teacher can express his or her views and interpretations:

History has become one of the most complex subjects to teach in schools. This is simply due to the fact that those who write history textbooks, design curriculum, develop standards and programmes have been influenced by changing ideological perceptions. The catalogue of problems in teaching history has become incredibly daunting ... Everybody has their own opinion and offer their own solutions [on teaching history in schools JZ, http://www.ug.ru/?action = topic&toid = 12005].

The above account suggests a shift towards a more subjective, personal and inclusive interpretation of historical events. Far more emphasis is now placed on national identity, patriotism, and the need to become familiar with the history of one's country (Zajda, 2007a). It has been argued by some scholars that 'nation builders rarely make new myths – rather they imagine history and mine the past for suitable heroes and symbols' (Zajda, 2007a, p. 301). The *imagined community* is a concept coined by Anderson (1991), which states that a nation is a community socially constructed and ultimately imagined by the people who perceive themselves as part of that group (see also Smith, 1991, 1998; Zajda, 2007a).

The Political Economy of History Textbook Publishing

History teachers in England, Australia, Canada, the USA, and elsewhere have long enjoyed freedom and independence in textbook selection. State-regulated or 'approved' textbooks 'never existed in England' (Crawford & Foster, 2006, p. 93). Forces of globalisation, marketisation and accountability have affected the nature, and the value of school textbooks. Standards-driven education policy and curriculum reforms in Europe and elsewhere have impacted on publishers and publishing. A State-mandated National Curriculum in the UK (1988), the Core Curriculum in the Russian Federation (1993), National Curricula in France, the Russian Federation, and Japan, to name a few, supported by a rigid regime of examinations, accountability, standards, quality, and value-added schooling, has meant that education publishers were responding to the demands of state-controlled and examination-driven accountability-defined education system.

The emergence of National History Curriculum, State/Federal Standards in History, and increased emphasis on examinations in schools and higher education institutions has meant that education textbook publishers 'are now acutely aware of the demands of the examination boards' and produce prescribed textbooks for the state-defined and controlled curricula (Crawford & Foster, 2006, p. 94). Debates in the USA, England, Germany, Japan, Greece, the Russian Federation, and China

were particularly intense during the 1990s and after 2000, concerning how and what history particular history narrative and ideological perspective should be included in schools. In England, for instance, the debates surrounding the New English National Curriculum and the proposed school history curriculum in the late 1980s and early 1990s were 'particularly acrimonious':

Textbooks today are more than ever packaged and produced to respond to the demands of an increasingly state-controlled education system and an increasingly profit-driven textbook industry ... the stakes were particularly high at this time because champions of both sides of the political divide understood that controlling access to the past had undoubted implications for how pupils perceived the present. (Crawford & Foster, 2006, p. 94)

Similarly, in France, due to its highly centralised education system, school history textbooks are published, according to prescribed history curricula and national examinations. In this sense, history in French schools has the status of a 'compulsory discipline', being placed 'behind French and mathematics' in the hierarchy of school disciplines (Baques, 2006, p. 105).

Conclusion

The above discussion demonstrates an existence of the nexus between ideology. the state, and nation-building as depicted in historical narratives of the more recent school textbooks. New ideological biases and omissions have been detected in textbooks in Japan, the Russian Federation, Greece and elsewhere. The 'Europeanization' of history textbooks in the EU is an example of western-dominated Grand Narrative of pluralist democracy, multiculturalism, and human rights, according to the canon of a particularly European dimension. Both the 'Europeanization' of history textbooks and politically-motivated reforms in history curricula and textbooks, as depicted above, demonstrate a new dimension of political socialisation, and the nation-building process currently taking place in the global culture. Recent and continuing public and political debates in the USA, China, Japan, and elsewhere, dealing with understandings of a nation-building and national identity, point out to parallels between the political significance of school history and the history debates globally (Han, 2007; Janmaat, 2007; Macintyre & Clark, 2003; Nicholls, 2006; Pingel, 2006; Smith, 1991; Taylor, 2006; Taylor & Young, 2003; Zajda, 2007b). Due to these ongoing debates concerning the role of history teaching in schools, its content and delivery, history education has become a high profile topic of national and global significance. The above analysis demonstrates that the issue of national identity and balanced representations of the past continue to dominate the debate surrounding the content of history textbooks. On the one hand, in many countries undergoing an all too-familiar process of nation-building, the three most significant issues defining an ideological re-positioning of the politically correct historical narratives are - preferred images of the past (reminiscent of Anderson's 'imagined community'),

patriotism and national identity. On the other, competing and contested discourses in historiography, together with a diversity in interpretations of events, and a trend towards a more analytical and critical approach to the critique of both the process and content of history in school textbooks, offer new pedagogical challenges to both students and teachers alike, who have been exposed to traditional, linear, descriptive and authoritarian views of the politically correct historical narrative. These competing discourses and diverse ideologies will continue to define and shape the nature and significance of historical knowledge, dominant ideologies and the direction of values education in history textbooks.

Biographical Note

Joseph Zajda, PhD, is a Professor in the Faculty of Education at the Australian Catholic University (Melbourne Campus). He specializes in comparative and international education (Russia, Poland, and Australia), education and policy, decentralisation and privatisation, and excellence and quality in education. He edits World Studies in Education, Curriculum and Teaching, and Education and Society for James Nicholas Publishers. His book publications include: Education in the USSR (Pergamon Press, 1990), Education and Society (James Nicholas Publishers, 2005), Society and the Environment (James Nicholas Publishers, 2005), Education and Social Justice (Springer, 2006), Curriculum, Culture and Teaching, Learning and Teaching James Nicholas Publishers, 2005). Decentralisation and Privatisation in Education (Springer, 2006), and Schooling the New Russians (James Nicholas Publishers, 2007). He is editor of the International Handbook of Globalisation, Education and Policy Research (Springer, 2005). He is co-editor (with Davies and Majhanovich) of Comparative and Global Pedagogies: Equity, Access and Democracy in Education (Springer, 2008), and co-editor (with Biraimah and Gaudelli) of Education and Social Inequality in the Global Culture (Springer, 2008). He is also the editor of the 12-volume book series Globalisation, and Comparative Education (Springer, 2008). In April 2004, he received the Vice-Chancellor's Award for Excellence in Teaching, Australian Catholic University. He was chair and co-chair (2003–08) of the World Council of Comparative Education Societies (WCCES) Publications Standing Committee. He was also on the Board of Directors of the Comparative and International Education Society, USA (2003-2007).

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TEACHERS' EMOTION REGULATION

Rosemary E. Sutton and Elaine Harper

Teachers' Emotion Regulation

Teaching is an emotional endeavor. Teachers may experience happiness when an instructional objective is met, pride when students accomplish an important task, frustration when students cannot grasp a concept, anger with misbehavior, disappointment with lack of effort, and anxiety when competence is challenged. Teachers report trying to regulate these emotions frequently because they believe it helps them achieve their goals (Sutton, 2004).

Over the past two decades, emotion regulation in everyday life has become an increasingly important topic in psychological research. Surveys indicate that the overwhelming majority of American adults regulate their positive and negative emotions consciously (Gross, Richards, & John, 2006) and it may be that emotion regulation is so common that we typically only notice its absence. The recent research on *teachers*' emotion regulation is built on the empirical results and theoretical models of this psychological research that assumes everyday emotion regulation is typically adaptive. For example, Mischel and Ayduk (2004) said, "an absence of will leaves people the victims of their own biographies," but also acknowledged that excessive postponing of gratification can become "a stifling joyless choice" (pp. 122-123). In contrast to the predominantly positive view in psychological research, a negative view of emotion regulation has permeated the sociology of work literature under the term "emotional labor" (Granley, 2000). In The Managed Heart, Hochschild (1983) argued that emotional labor takes effort and may result in stress and burnout, as well as feelings of inauthenticity and compliance. Both approaches acknowledge benefits and problems associated with emotion regulation but the relative emphasis varies.

The frequency and consequences of emotion regulation are believed to be moderated by cultural norms. Western values such as independence and self assertion are thought to encourage open emotion expression in many situations. When emotion regulation is used it typically assists individuals assert their will and protect themselves (Wierzbicka, 1994) but it also may be used to preserve relationships (e.g., suppressing anger with a friend). In contrast to Western values, Asian values of interdependence and relationship harmony may encourage control of emotions in order to aid prosocial goals and positive social interactions rather than asserting individual will. This suggests that any negative consequences of

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emotion suppression are likely to be lower in individuals holding Asian versus Western values. Empirical research on cultural mediation of emotion regulation is meager but one recent study demonstrated that American College students holding Western European values reported less daily suppression of emotions and more negative consequences of suppression than those students holding Asian values (Butler, Lee, & Gross, 2007).

In this chapter we summarize current theory and research in teachers' emotion regulation conducted in North American settings. First, we define emotion regulation and then review three theoretical models: hot/cool system, resource or strength, and process. Next, we explore teachers' reasons for regulating their emotions and the possible relationship between emotion regulation and burnout. We end with a discussion of the strategies teachers use to regulate their emotions and implications for research and practice.

What Is Emotion Regulation?

Current conceptions of emotions consider them processes involving multiple components arising from experiential, behavioral, and physiological systems; emotion regulation involves the unconscious and conscious attempts to modify any of these processes (Ochsner & Gross, 2004). Emotions vary in how they are experienced, e.g., being fearful does not feel the same as being happy. People often try to modify how they feel, e.g., by attempting to prolong their happiness or replace their fear with relief. There appears to be wide cultural and individual variations in emotional experiences despite the similarities among emotions across cultures (Mesquita & Markus, 2004). Emotions include cognitive processes, e.g., being angry typically involves the judgment that someone else is to blame for an aversive event or transaction whereas frustration does not involve other-blame. Modifying these cognitive processes (e.g., by trying to reduce attributions of blame) is a strategy of emotion regulation. Action tendencies are a component of the behavioral emotion processes, e.g., fear involves the tendency to escape to safety. There are also individual and cultural variations in action tendencies: while it is common for individuals experiencing anger at another person to have an impulse to move toward that person, some individuals and groups, especially the Dutch, have an impulse to move away (Mesquita, Frijda, & Scherer, 1997). Individuals can regulate these action tendencies, e.g., by choosing not to move at all when angry. Behavioral processes also involve facial expressions such as the raised eyebrows and open eyes common in surprise. People may try to modify these facial expressions so their emotions are not communicated to others, or alternatively, to increase the communication of the emotions. Recent studies have documented cultural variations as well as individual differences in emotion expressions suggesting that in some situations Chinese Americans are less expressive than European Americans (Tsai, Levenson, & McCoy, 2006). Heart rate, breathing rate, blood pressure, and skin temperature are all components of emotion physiological systems and attempts to modify them include deep breathing or exercising.

Up-regulating an emotion involves attempts to increase the intensity or duration of the experience. Teachers may up-regulate a positive emotion like joy or enthusiasm in order to communicate a positive tone in the classroom. Teachers may, on occasions, up-regulate anger in order to make the seriousness of the infraction clear to a student. Down-regulating involves reducing the emotion experience and teachers report they often down-regulate their negative emotions such as anger in order to continue with the planned classroom activities and to establish or preserve positive relationships with students. American teachers, like other Americans, report down-regulating negative emotions more often than up-regulating positive emotions; consequently much of the current theory and research focuses on down-regulating negative emotions.

Models of Emotion Regulation

Emotion regulation is an active area of theory and research in social psychology and in this section three theoretical models (Vohs & Baumeister, 2004) and their relevance for teachers are summarized.

Hot/Cool System

Mischel and colleagues (e.g., Metcalfe & Mischel, 1999; Mischel & Ayduk, 2004) proposed that emotion regulation consists of a hot and cool system. The cool system is cognitive, complex, slow, contemplative, and emotionally neutral. It consists of a network of informational "cool nodes" that are elaborately connected to each other, and which generate rational, reflective, and strategic behavior. In contrast, the hot system is a "go" or "hot button" system that enables quick and simple emotion processing. The hot system consists of relatively few "hot spots" that develop early in life and the hot system dominates the cool system in infants. With maturity, the cool system becomes increasingly elaborate as many cool nodes corresponding to each hot spot.

According to this model teachers who successfully regulate their emotions change the "hot" representation of the immediate situation to a cool one by ignoring the stimulus (e.g., ignoring mild misbehavior of students), distracting themselves (e.g., thinking of a serene place when trying not to laugh at a student's inappropriate joke), or reframing the meaning of the stimulus (e.g. reminding oneself not to take students' misbehavior personally). At high levels of stress, the cool system becomes dysfunctional, leaving the hot system to dominate cognitive processing making emotion regulation difficult. Teachers working in particularly stressful environments may have more hot spot dominance than teachers working in less stressful environments. Beginning teachers often experience high levels of stress and therefore are less likely to use cooling techniques when highly aroused. With experience, teachers should develop more cool nodes associated with each hot spot. These cool nodes could include knowledge and skills about child development, management and discipline, motivation and teaching strategies, or reflection on prior experiences and strategic behaviors. Teachers report that they improve their self-regulation of emotions with experience but as yet we do not have longitudinal studies to confirm this (Sutton, 2004).

Resource or Strength Model

The strength model proposed by Baumeister and colleagues (e.g., Baumeister, Bratslavsky, Muraven, & Tice, 1998; Schmeichel & Baumesiter, 2004) assumes that self-regulation of any type takes energy or inner resources but that self-regulatory strength is a limited resource. When self-regulation resources are depleted, emotion regulation failures are more likely. For example, a teacher who exerts energy trying to keep to her diet at breakfast may find it more difficult to control her anger at several students' misbehavior in a morning class. The high school teacher who manages to control his frustration during the first two classes containing a number of very difficult students is more likely to lose control in the third period even if student misbehavior is less severe than in the earlier classes. This model suggests that teachers who must frequently tap coping resources dealing with the daily annoyances in some physically deteriorating schools (e.g., broken photo copy machines, dirty restrooms) or poorly managed schools (e.g., an overbearing principal, chaos in hallways) may find it harder to regulate their emotions – either to up-regulate their positive emotions or to down-regulate their negative emotions.

Most research on the resource or strength model has focused on self-regulation failures. While it is assumed that rest is needed to restore strength, studies have shown that motivation can also overcome resource depletion and reduce self-regulation failures (Muraven & Slessareva, 2003). This suggests that teachers who are sufficiently motivated may be able to overcome their depleted self-control resources and successfully regulate their emotions even in taxing situations. Current research suggests that most teachers believe that regulating their emotions makes them more effective in the classroom so they are likely to be motivated to do so (Sutton & Knight, 2006a). This research is described in the section on teachers' beliefs about emotion regulation.

Process Model

James Gross and colleagues (e.g., Gross & Thompson, 2007; Ochsner & Gross, 2004) assume that emotions are complex processes that unfold over time and that emotion regulation can occur at five points between the stimulation of an emotional response and its expression. Four of these points: selecting situations, modifying situations, attention deployment, and cognitive change are preventive, i.e., what individuals do before the emerging emotion becomes fully activated. The fifth point is response-focused and involves the modulation of experiential, behavioral, or physiological emotion responses.

A teacher who likes adolescents but finds young children annoying may chose to teach at the high school level – selecting a situation that should support her positive emotions and moderate her negative emotions. A teacher who finds students constantly forgetting their pencils frustrating may modify the situation by keeping a supply in his desk thus preempting his frustration. A teacher with a chronic illness may use attention deployment before school by focusing on being energetic and enthusiastic rather than giving in to her fatigue. A teacher who has been angry with a student for a week because of his recent disruptive behavior may learn that the

student's father was recently incarcerated. This teacher may reappraise the disruptive incidents and feel compassion, not anger, because of this cognitive change. Such cognitive changes can alter the intensity of an emotion, in addition to influencing which emotion is actually experienced.

Response modulation occurs *after* the emotion has been triggered and can alter the intensity or duration of the experiential, behavioral, or physiological responses (Gross, 1998). In the immediate teaching situation, self-talk might modify the experience, deep breathing could be used to relieve the physiological response, and the emotional expression could be modified by attempting to control facial expressions.

According to this model, some emotion regulation strategies are more likely to be effective than others. For example, during reappraisal – an antecedent-focused form of cognitive change – people try to control their emotions by changing the way they think about a situation early in the generation of an emotion. A middle school teacher with 8 years of experience said: "So [I] just step back, think for a moment and it really doesn't take too long, but that moment that you stop and think... has helped me tremendously" (Sutton & Knight, 2006a, p. 113). This is similar to the use of cool nodes proposed in the hot/cool system described above. Conversely, suppression as a form of emotion regulation typically occurs late in the generation of the emotion response and involves trying not to express one's emotions by controlling facial expressions, bodily responses, and utterances. Teachers who use suppression to modify their anger and frustration report "forcing themselves to be calm" or "sheer will." Teachers who try to control themselves as well as a disruptive situation are engaged in a "double struggle" that can be extremely difficult.

Studies in social psychology have shown that individuals who report using reappraisal also report more positive mood, positive emotion expression, life satisfaction, and peer-rated likeability. In contrast, those individuals reporting using suppression as an emotion regulation strategy report problems in intra and interpersonal functioning such as feelings of inauthenticity, depression, and avoidance of attachment to others (Gross & John, 2003). There is emerging evidence that the expression of positive emotions and caring interpersonal relationships are associated with effective teaching so it may be that effective teachers who seek to regulate emotions, particularly by down-regulating their negative emotions, may be more likely to use reappraisal rather than suppression.

The type of emotion regulation strategy used appears to be related to the memory of an emotion-related event. Reappraisal occurs early in the emotion event and changes the emotional significance of the event and so should have little influence on cognitive resources and memory. In contrast, suppression requires continuous self-monitoring and self-corrective actions for as long as the emotion event lasts and *so reduces* cognitive resources for memory. The strategy distraction requires that individuals do not think about the emotion-triggering event thus reducing their attention and memory. Limited support for these predictions comes from several experimental studies using undergraduates as participants who remembered less of specific events when they were directed to use suppression rather than reappraisal. (Butler et al., 2003; Richards, Butler, & Gross, 2003). Since it is important that teachers recall classroom conversations and events, use of suppression and distraction

to regulate emotions may hinder effectiveness whereas the use of reappraisal should be positively related to or unrelated to effectiveness. In one study teachers were asked to report how often they used suppression or reappraisal strategies and also to report their level of teaching efficacy. K-8 teachers who reported higher levels of reappraisal use also reported higher levels of two types of teacher efficacy; efficacy for classroom management and student engagement. However, there was no relationship between self-reported use of suppression and teacher efficacy (Sutton & Knight, 2006a). Research to determine if some emotion regulation strategies teachers use are more effective than others is important. This research should include classroom observations not just self-report data.

Teachers Beliefs about Emotion Regulation

Three related sets of teachers' beliefs about their own emotion regulation have been studied. These are teachers' goals for regulating their emotions, their beliefs about the effectiveness of showing their emotions, and their confidence in their ability to communicate their positive emotions and decrease their negative emotions in the classroom (Sutton, 2007).

Goals for Emotion Regulation

Reference goals or standards are central to current psychological conceptions of selfregulation, which assume that self-regulation involves more abstract and longer-term goals over riding concrete short-term goals. For example, a teacher may try not to communicate her immediate feelings of anger toward a defiant student because she believes this will help nurture her relationship with the child which will help reduce the acting-out behavior in the long term.

There are cultural and individual variations in the reference goals or standards for the display and experience of emotions. "Display rules" are norms about which emotions can be displayed under specific situations and some teachers report that they regulate their emotions because it is part of the teacher role, or being a professional. There are also cultural and individual variations in "feeling rules," e.g., teachers may believe it is not acceptable for them to feel angry with a severely disabled child. The majority of teachers who have been surveyed in the United States say that their goals for emotion regulation are to avoid interpersonally disruptive emotions such as anger and disgust and to increase prosocial emotions such as happiness and affection. For example, in one recent survey, 80% of teachers said they always or almost always tried to increase positive emotions and 65% said they always or almost always tried to decrease negative emotions (Sutton & Knight, 2006b).

However, there are individual differences as a few teachers report trying to increase negative emotions and decrease positive emotions. These teachers may be in very difficult classrooms – teachers say that when they have students who are mean and gang up against them, they (i.e., the teachers) have to be tough and not smile. A few teachers also report that they believe "being real" as a teacher means that they should

communicate the range of positive and negative emotions they experience and not try to modulate them in any way. As yet there are insufficient data to indicate the relationship between teachers' goals and the context in which they live and work, e.g., the school setting, grade level and/or subjects taught, or type of students.

Perceived Effectiveness

Conscious emotion regulation occurs, in part, because individuals believe that overriding the immediate subjective emotion experience assists their longerterm goals thus making them effective. These beliefs are often called outcome expectancies. Teachers in the United States and Canada report that they are most likely to regulate their emotions because they believe it makes them more effective (Hargreaves, 2000; Sutton, 2004). They report that their negative emotions are triggered by students' misbehavior, lack of effort, or interference with their goals and that reducing these negative emotions helps by keeping them focused on their goals of student academic learning and nurturing relationships with students. Teachers up-regulate their positive emotions because they believe this helps increase students' attention and motivation. Humor is used to build relationships and also diffuse difficult situations that otherwise may result in unproductive negative emotions of students and teachers.

There are few individual differences in teachers' beliefs about the effectiveness of regulating positive emotions. In a survey of over 400 teachers in Ohio, 97% of the teachers reported that showing positive emotions made them sometimes, usually, or always *more* effective. However, there are important individual differences in teachers' beliefs concerning the effectiveness of regulating negative emotions. Nearly 60% respondents said showing negative emotions made them sometimes, usually or always *less* effective, whereas only 36% said showing negative emotions made them feel sometimes, usually, or always *more* effective (Sutton & Knight, 2006a). A follow-up study in the same region indicated that the largest variation among teachers' beliefs is in the effectiveness of showing the specific emotions anger/ frustration and disgust rather than disappointment or sadness.

Emotion Regulation Efficacy

Efficacy of emotion regulation refers to the confidence individuals have that they can communicate their positive emotions and reduce their negative emotions when teaching. A study of teachers in Ohio found that almost all the teachers were highly confident they could communicate their positive emotions such as enthusiasm or enjoyment to students but they are less confident they could reduce their negative emotions such as anger or stress when in the classroom. Those teachers who were less confident they could decrease their negative emotions also reported they were less likely to try to decrease their negative emotions and were less likely to believe that reducing negative emotions was effective (Sutton, 2007). This suggests that teachers' beliefs about the role of negative emotions when teaching are consistent. We do not yet have enough research to know if those teachers who are more confident that they

can reduce their negative emotions are more skilled as doing so. Observational studies are needed to determine this.

In summary, experienced teachers say they seek to communicate and up-regulate their positive emotions and down-regulate their negative emotions believing that this makes them more productive. This is consistent with emerging evidence that a hallmark of an effective teacher is constructing a productive learning environment using humor and the expression of positive emotions rather than a predominance of negative emotions. However, teachers are much more confident that they can communicate their positive emotions than reduce their negative emotions. In the next section we discuss whether the everyday emotion regulation that teachers report is part of their work is related to burnout.

Emotion Regulation and Burnout

Burnout was originally conceived as comprising three dimensions: exhaustion, depersonalization (or cyncism) and reduced personal accomplishment (or sense of inefficacy) (Maslach, Jackson, & Leiter, 1996). Questions about the relationship between teachers' emotion regulation and burnout, often assume the Western values described at the beginning of this chapter that stress independence and self assertion are so encourage open expression of emotions. From this perspective, frequent emotion regulation is believed to take an emotional toll and result in feelings of inauthenticity and so contribute to burnout. The findings of the research summarized above suggest any relationship between burnout and emotion regulation is complex and we need to consider teachers' goals, which emotions are regulated, and the strategies used to regulate emotions.

First, most of the teachers surveyed believe that regulating their emotions makes them more effective but one of the dimensions of burnout is feelings of reduced personal accomplishment. This suggests teachers who believe they are successful at regulating their emotions may be less susceptible to feelings of burnout. A recent study on teachers' emotion intelligence (emotion regulation is one component of emotion intelligence) found that teachers with higher levels of emotion intelligence had higher, not lower, levels of job satisfaction (Brackett, 2007). However, according to the resource model of emotion regulation, attempts to modify emotions take energy and one characteristic of burnout is exhaustion. This suggests that frequent attempts to regulate emotions, especially if those attempts fail and so do not have the possible benefits of increased teaching effectiveness, may contribute to feelings of exhaustion. It may also be that teachers who are suffering high levels of burnout are unable to regulate their emotions.

Second, teachers report that they find it easier to regulate their positive emotions than their negative emotions, so it may be that the connection between emotion regulation and exhaustion is more likely to occur when teachers focus on managing their negative emotions. These teachers may be in very difficult classrooms which may contribute to burnout with lower feelings of efficacy, exhaustion, as well as depersonalization.

Third, according to the process model, the effectiveness and consequences of emotion regulation is related to which strategies are used. An antecedent strategy such as reappraisal has mostly positive associations whereas a responsive strategy, such as suppression, does not. A recent study of teachers supported this model as those with high levels of burnout reported using more "surface acting" strategies, i.e., strategies that involve modifying the face or tone of voice rather than rethinking or appraising the situation (Carson, 2006).

Another factor that is important is the intensity of the experienced emotion. The perceived intensity of anger and frustration episodes reported by teachers in one study was associated with longer duration of the emotion episodes, intrusive thoughts, immediate actions in the classroom, and doing something specific to cope (Sutton, 2007). That is, high intensity episodes were associated with changes in teachers' classroom behaviors – changes that include emotion regulation and may influence their teaching effectiveness. In addition, teachers who reported high levels of emotion intensity were more likely to endorse the effectiveness of showing negative emotions, were less likely to report using suppression as a strategy, and had lower levels of teacher efficacy than teachers reporting lower levels of emotion intensity. It may be that these "high" intensity teachers show their emotions more often in the classroom and are less likely to regulate their emotions but have lower confidence in their skills to manage or teach effectively than "low" intensity teachers (Sutton, 2007). This pattern of characteristics may over time, be related to reduced effectiveness and increased burnout.

This discussion of the possible relationships between burnout and emotion regulation is based on theoretical models but only on limited empirical research. We believe that more work in this area is crucial and that the links between emotion regulation and burnout are likely to be very complex.

Teachers' Emotion Regulation Strategies

Teachers, like other adults, report that they use a variety of emotion regulation strategies in order to adapt to the situations they experience. Most of these strategies are associated with reducing negative emotions. In this section we discuss a variety of these strategies and first consider those that are antecedent-focused followed by those that are response-focused (Sutton, 2004).

Antecedent-Focused Strategies

Some strategies teachers report using to help them regulate their emotions are not specific to teaching and these may be particularly important for beginning teachers. For example, teachers talk about the importance of thinking positive thoughts including focusing on the day-to-day joys of teaching (e.g., when a child "gets it") and using self affirming statements. Teaching is a demanding profession and teachers report the dangers of self-regulation failures when they are tired. The resource model supports these comments and engaging in activities that can restore depleted resources such as getting enough sleep is important.

Teachers need to learn about their "hot spots" and try to develop cool nodes. Keeping an emotion teaching diary may help identify if there are common patterns in timing, situations, and antecedents of intense emotion episodes. Once hot spots are identified, teachers can plan to prevent them. For example, if a hot spot for one teacher is constant talking among students then she may change student seating arrangements to prevent student interactions. Sometimes a specific student can become a hot spot and the teacher may learn not to focus on that specific student and so reduce the potential for unregulated anger or frustration.

Because teacher's negative emotions are typically aroused when students misbehave or do not pay attention, building knowledge and skills about instruction and classroom management should help develop cool nodes. Teachers can learn to use specific teaching or management strategies such as have the class do a quiet activity or redirecting students in order to prevent situations escalating. These skills can be learned from formal instruction as well as from dialogues with colleagues and through self reflection. Teachers report that reflecting during the potentially difficult situations (e.g., "remember what happened last time when I got angry") also can help them manage their emotions more effectively. One of the most important cognitive strategies for prevention is reappraisal. Teachers talk about the importance of learning "not to take it personally" or remembering "they are kids." Research based on the process model suggests that teachers who use reappraisal are likely to be more effective than those who use suppression or distraction.

The overall classroom atmosphere established by teachers can help prevent negative emotions from escalating. Some teachers use appropriate humor and initiate classroom situations that enhance students' positive emotions believing this helps them, and their students manage their negative emotions more effectively during difficult episodes. Skilled teachers also engage students in discussions about emotions, strategies for emotion regulation, and the possible consequences of inappropriate emotion expression in the classroom.

Response-Focused Strategies

Response focused strategies are characterized by the modulation of experiential, behavioral, or physiological emotion responses late in the generation of the emotion response. The most commonly described response-focused strategy during the emotion episode is suppression when a teacher tries to keep his or her face passive and not say anything inappropriate. Current research suggests that this is often an ineffective technique but teachers, especially beginning teachers who are often surprised by classroom situations, may find no other immediate alternative. Reducing the physiological response by pausing and breathing deeply is commonly used by adults including teachers. "Counting to 10" while breathing deeply can also help change the cognitive thoughts associated with intense negative emotions. Teachers also report stepping back from the situation during the immediate emotion episode and exercising or relaxing at the end of a difficult school day. These techniques are used in out-of-classroom situations by many adults.

Some strategies can be used both preventatively and responsively. For example, rethinking the situation or reappraising can occur late in the emotion response as well as early. Teachers can find it difficult to determine when during an emotion

episode they rethought a situation by saying things such as "I understand how difficult this child's environment must be at home," or "I've made it through many difficult meetings with parents." Talking at the end of the day is a favorite strategy of many teachers but the research evidence on venting of anger is mixed. If the talk about the anger episode includes reappraisal and ideas for new teaching strategies then it should be helpful by enhancing cool nodes. However, if the venting focuses on how terrible the situation is without consideration for new strategies or the opportunity for reappraisal then the intensity of the anger may increase, perhaps making the hot nodes even hotter.

Some teachers report that at the end of a very difficult day they focus their energies on planning preventatively for the next day. They consider how to reduce the amount of negative emotion in the classroom by utilizing specific teaching techniques and devising interventions strategies for specific students that will reduce the likelihood they will get into conflicts. These teachers are using an after-school responsive strategy that also is preventative illustrating the complexity of emotion regulation. While response-focused strategies are necessary to manage immediate situations, planning and implementing strategies prior to the onset of the emotion trigger should be more productive and beneficial for teachers as well as for students.

Research & Practice Implications

Research on teachers' emotion regulation is in its infancy and extensive research is needed to understand the basic processes, cultural context, and classroom implications. While social psychology research on emotion regulation processes flourishes in laboratories, the relevance for teachers in classroom settings is only just beginning to be understood. We do not know the role of unconscious as well as conscious emotion regulation, how teachers' beliefs about emotion regulation are related to the multiple emotion components including overt behaviors, nor if the emotion regulation processes of beginning teachers are similar to those of more experienced teachers. Research on the role of cultural context of teachers' emotion regulation is crucial. The current empirical studies have been conducted mostly in the Great Lakes region in the Midwestern United States or Canada and we assume that there are variations of cultural norms and behaviors in classroom settings.

However, even the limited research available suggests important implications for teachers. Emotion regulation is an important component of classroom management and discipline, and experienced teachers believe that successful regulation makes them more effective in the classroom. Choosing to regulate emotions in the classroom does not mean that teachers want to eliminate emotion expressions in the classroom. Rather, it means they seek to find a balance – and this often takes time. As one teacher in his 7th year said:

I've gotten much better at masking my emotions in the classroom. I do like to have some emotion in there. I don't want to appear like a robot; I want the students to be interested. I want them to trust me and have faith in what I say. I want them to know when I'm not happy and when I am, but going too far one way or the other - I learned just by mistake, by actually doing it - and it's not a good thing to do one way or the other. (Sutton, 2005, p. 232)

Unfortunately, teacher education programs have traditionally paid little attention to emotions, so beginning teachers have had to learn about emotion regulation on their own or with the assistance of peers. The existing research, described in this chapter, has begun to provide important information about the role of emotion regulation in the classroom, the importance of emotion regulation to teachers, and the variety of strategies they use to help them up- and down-regulate their daily emotions.

Biographical Notes

Rosemary E. Sutton is a professor of education in the department of Curriculum and Foundations at Cleveland State University in Ohio. She has taught undergraduate and graduate students courses in educational psychology for more than 20 years. Her research interests have varied from equity and technology, developmental characteristics of pre-service teachers, the role of assessment in the classroom, and teachers' emotions. Her current research focus is teachers' emotion regulation –an interest that began very early in her career when she was a high school mathematics teacher in New Zealand. For the past 4 years she has also worked in University Administration, first as the Director of Assessment and now as the Provost of Undergraduate Studies.

Elaine Harper is a doctoral candidate in the Urban Education Ph.D. program at Cleveland State University. She serves as Education Coordinator for Positive Education Program in Cleveland, OH. PEP helps troubled and troubling youth through the Re-ED approach, blending quality education and mental health services in partnership with families, schools and communities. Her dissertation focuses on examining the relationships among bibliotherapy, emotional awareness and characteristics of children with emotional and behavioral disorders.

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PRINCIPAL AND TEACHERS RELATIONS: TRUST AT THE CORE OF SCHOOL IMPROVEMENT

Pamela R. Hallam and Charles Hausman

Introduction

Educational leaders and teachers face constant internal and external pressure to reform their practice to ensure that every student meets high standards. In many countries, including the United States, the last two decades have been characterized by large-scale reforms of public education systems (Fullan, 2001; Seashore-Louis, Toole, & Hargreaves, 1999; Young & Levin, 1999). According to Cranston (2007), "these reforms are due to powerful political, social, and economic shifts in the environment in which schools are nested; advances in our understanding of learning, organization and management of schools; and shifts in the expected relations between schools and clients" (p. 1). Consequently, new conceptualizations for the profession of educational leaders and teachers need to be developed (Murphy, 2002).

In light of such fundamental shifts in the landscape of schooling, many researchers contend that the relationships between stakeholders are pivotal to the success or failure of school reform (Bryk & Schneider, 2002). Clearly, in this era of accountability and the pressures that accompany it, there is a premium placed on the interpersonal skills of school leaders. This chapter focuses on one key element that is central to productive relationships between principals and teachers. Specifically, this chapter explores how trust can facilitate school leaders, working in tandem with teachers, to use the current accountability mandates to focus their efforts in professional learning communities to improve organizational practices and student outcomes.

The Landscape of Accountability

Accountability is often used synonymously with such concepts as answerability, responsibility, blameworthiness, liability and other terms associated with the expectation of account giving (Wikipedia, 2008). However, accountability is described in another view as a simple word that, at its root, means "the willingness to stand up and be counted – as part of a process, activity or game" (Wikipedia, 2008). In this sense, accountability is less something I am held to, or something done to me; rather,

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it is a word reflecting personal choice and a willingness to contribute to an expressed or implied outcome (Wikipedia, 2008). The question becomes, how can this type of accountability be fostered in schools?

In the United States, the current attempt to hold schools accountable comes as a result of the Federal *No Child Left Behind* (NCLB) act. The adequate yearly progress (AYP) provisions of the NCLB act are complex and multifaceted. For example, under NCLB, a school must meet AYP benchmarks established by the state and federal governments. Moreover, ten different subgroup populations in a school (e.g., students with disabilities, Hispanic students, economically disadvantaged) must meet the target goals established for a school. If one of the ten subgroups does not meet the target goals, the school will not meet AYP. If this were to occur for more than two consecutive years, those schools receiving Title I funding, a federal program that helps fund schools in areas of economic need, could face sanctions, which increase in severity for every year a Title I school does not make AYP. Consequently, states and school districts are structuring new accountability mechanisms and mandating changes in instructional practices.

Mizell (2003), in *NCLB: Conspiracy, Compliance, or Creativity?*, observes that people respond to the NCLB act in one of three ways. First, "there is the group that considers the law to be malevolent – a conspiracy by the Bush administration to dismantle public education" (p. 7). Mizell reports that "many educators believe that NCLB sets unreasonable expectations that schools cannot meet, and when they fail, it will provide ammunition for those who advocate vouchers and other alternatives to public education. He warns that the conspiracy theory is just an excuse for resistance" (p. 7).

The second response to the NCLB legislation is to worry about compliance. He cautions that although it is understandable that administrator's focus on the nutsand-bolts of how to comply with NCLB there is a danger in doing so. "Staff may become so focused on NCLB compliance issues that they lower the expectations of their own roles, and almost without realizing it, they may become *de facto* compliance officers and forfeit their roles as education leaders" (p. 4). In other words, leaders may focus on making sure their teachers are in total compliance with all the new rules (whether district or school) being imposed on them, without viewing themselves as being responsible for assisting and providing resources to help teachers make necessary improvements for student learning. Mizell (2003) explains, "It is a bad omen for public education when educators resign themselves to being victims rather than leaders" (p. 6). He concludes that worrying about compliance causes stakeholders to act out of fear rather than hope.

The third type of reaction to the NCLB legislation is for educators and leaders to take the opportunity to become creative. Mizell explains, "Here I am speaking of creativity not in implementing the law, but rather *using* the law to improve teacher quality and to enable all students to become academically proficient. Implementing the law and using the law are not the same. Efforts to implement the law focus on minimums, the least effort required to demonstrate compliance. Efforts to use the law focus on maximums, milking the law for all it is worth to generate new vision and commitment, and to put in place more effective policies and practices" (p. 5). Mizell challenges educators to "Reject 'No Child Left Behind' as a slogan and to transform it into reality" (p. 7).

In the past, school systems have served to sort and rank students to play different roles in society (Goodlad, 1984). However, with the passing of NCLB and similar initiatives in other countries, this goal is being replaced with the responsibility for schools to ensure that all students have the basic skills necessary for success (Tschannen-Moran & Hoy, 2000). This movement has at its core the value of equity, especially for groups of students who in the past have been underserved. One of the tenants of the NCLB legislation is an emphasis on shared decision-making, which requires administrators to trust teachers and parents that involved in the decision-making process (Smylie & Hart, 1999). According to Tschannen-Moran and Hoy (2000), "these new forms of governance increasingly require an atmosphere of trust" (p. 548).

Trust: The Fulcrum for Reform

A fulcrum is "a person, organization or object used to apply power and get results" (Newbury House Dictionary, 2003). With the anxiety caused by No Child Left Behind, could trust be the "untapped resource" (Bryk & Schneider, 2002) which has the potential to help school principals accomplish Adequate Yearly Progress (AYP)? And if trust plays a vital role in the school reform process, then how does this impact the focus of principal leadership?

Trust and Organizational Outcomes

Trust has been shown to have many positive organizational benefits. Trust is considered to be an important component of successful organizations (Argyris, 1973; Bryk & Schneider, 2002; Hoy & Tschannen-Moran, 2003; Likert, 1967; McGregor, 1967), facilitating cooperation and collaboration (Das & Teng, 1998; Deutsch, 1958; Tschannen-Moran, 2001), enhancing organizational productivity (Fairholm, 1994; Ouchi, 1981), improving communication (Giffin, 1967; Hughes, 1974; Zand, 1972), and achieving collective efficacy and supportive structures (Forsyth, Barnes, & Adams, 2006).

Some researchers view trust as the binding agent in organizations. Shea (1984) proclaims, "Trust is the miracle ingredient in organizational life—a lubricant that reduces friction, a bonding agent that glues together disparate parts, a catalyst that facilitates action. No substitute, neither threat nor promise, will do the job as well" (p. 2). Cultivating a climate of trust has several benefits and appears to be foundational in realizing organizational effectiveness.

The consequences of distrust have also been noted in the literature. Louis (2007) asserts that fear, emotional distance, and anger is correlated with a low-trust environment. Fear is associated with the discomfort of change and other power shifts in the organization. When distrust prevails, any change is viewed with increased suspicion and fear.

Trust directly influences commitment. Commitment comes from a feeling of belonging and making a contribution to the organization's goals. When distrust is

prevalent, emotional distance is produced resulting in a lack of identification with the organization, burnout, and even a feeling of loss.

Anger results because employees in low trust environments "operate under high levels of stress. They spend a great deal of effort covering their backsides, justifying past decisions, or looking for scapegoats when something doesn't work out" (Sonneberg, 1994, p. 20). As trust decreases, individuals become angry about changes in goals and expectations, often resulting in a perception of differential sacrifice by the participants in the organization. Finally, when there is little trust "people are increasingly unwilling to take risks and demand greater protections against the possibility of betrayal" (Tyler & Kramer, 1996, pp. 3–4). Therefore, a climate of distrust is inefficient and less productive because individuals are unwilling to collaborate with each other or to follow their leader.

Researchers have cautioned about the damaging cycle that occurs in an organization once distrust is instituted. Tschannen-Moran and Hoy (2000) warn, "One of the most difficult things about distrust is that once it is established it has a strong likelihood of being self-perpetuating when interacting with a distrusted person, even normally benign actions are regarded with suspicion" (p. 37). Govier (1992) explains, "The distrust impedes the communication which could overcome it ... So that suspiciousness builds on itself and our negative beliefs about the other tend in the worst case toward immunity to refutation by evidence" (p. 56). Blasé and Blasé (2001) agree, "The reward of a trusting environment is immeasurable, yet the price of lack of trust is dear" (p. 23). Therefore, distrust is hard to control and can be insidious once it is present in an organization. Employees want to work in an environment where trust dominates the culture, thus making it easier for them to make a contribution to the organizational goals and objectives.

Trust as a Central Characteristic of Effective Leadership

The role of the leader has also been noted in the literature on trust. Whitener, Brodt, Korsgaard, and Werner (1998) proclaim, "If organizations hope to garner the benefits of a trusting work environment, it is management's responsibility to initiate trusting relationships through trustworthy behaviors on the part of managers" (p. 516). According to a study conducted by Kouzes and Posner (1987), 1,500 managers were asked to identify the top five "characteristics of superior leaders" (p. 17). They reported their findings according to the rate of recurrence: (1) "Integrity – truthful, trustworthy, has character, has convictions), (2) competence – capable, productive, efficient, and (3) leadership – inspiring, decisive, provides direction" (p.17). These researchers conclude that these characteristics give the leader credibility and respect.

Research has identified trust as a significant factor that unite leaders and followers. According to Hoy and Kupersmith (1985) the way in which the faculty perceives a principal's actions is essential in schools. Teacher trust in the principal is the filter through which teachers determine the principal's support efforts (Fullan, 1999; Hoy & Kupersmith, 1984; Hoy, Tarter, & Kottkamp, 1991). On the other hand, a principal's trust in teachers is key in determining whether teachers will choose to change their practices and engage in school reforms (Murphy & Louis, 1994). Nanus (1989) argues that, "Trust is seen as a vital element in well functioning organizations. It is the mortar that binds leader to follower and forms the basis for leaders' legitimacy" (p. 101). Likewise, Block (1993) concludes, "The fire and intensity of self-interest seem to burn all around us. We search, so often in vain to find leaders we can have faith in. Our doubts are not about our leaders' talents, but about their trustworthiness. We are unsure whether they are serving their institutions or themselves" (p. 9).

Overall, researchers agree that trust is a vital component in organizations and that management has the primary obligation to facilitate the trust-building efforts in their organizations.

The Centrality of Trust in School Improvement

Julie Kochanek (2005) in *Building Trust for Better Schools* outlines why trust is particularly important when schools are taking on large reform efforts. She posits, "Trust can facilitate conversations about instructional reform that give the experts a chance to share their understanding of the reform with the teachers, and teachers a chance to share their feedback on how the reality of the reform's implementation measures up to expectations" (Spillane & Thompson, 1997, p. 6).

Teachers who report high levels of trust with their colleagues also express a greater openness to innovations (Bryk & Schneider, 1996). In trusting environments, teachers are able to encourage one another's thinking about instruction and the ways in which new reforms could affect student learning. Kochanek (2005) further notes "teacher-principal trust allows the principal to introduce instructional and organizational changes to a more receptive faculty. Teachers who feel valued as professionals are open to input from a principal" (p. 6). Faculty members who report high levels of trust also describe a strong commitment among teachers to the school and recognition among the faculty that they have a collective responsibility for the welfare of their students (Bryk & Schneider 1996).

Finally, Kochanek (2005, p. 6) points out that the latest research on trust in schools has "demonstrated a positive relationship between trust and school effectiveness, making a connection between the growth of trust and organizational changes which can lead to improved educational outcomes for students" (Bryk & Schneider, 2002; Goddard, Tschannen-Moran, & Hoy, 2001; Hoy, Tarter, & Witkoskie, 1992). Tschannen-Moran and Hoy (2000) agree, "In short, if schools are to realize the kinds of positive transformation envisioned by leaders of reform efforts, attention must be paid to issues of trust" (p. 549).

Bryk and Schneider (2002) assert in their book *Trust in Schools: A Core Resource for Improvement* that in order for what they term "relational trust" to develop, which is the quality of relationship between the principal and teachers, educators need to be cognizant of four qualities deemed important in developing trust. These qualities are respect, competence, personal regard for others and integrity. As a result of case studies and survey analysis, these researchers assert three major conclusions.

First, "collective decision making with broad teacher buy-in occurs more readily in schools with strong relational trust. Second, when relational trust is strong, reform initiatives are more likely to be deeply engaged by school participants and diffuse broadly across the organization. key in this regard is that relational trust reduces the risk associated with change" (p. 122). Third, "relational trust foments a moral imperative to take on the hard work of school improvement" (p. 123). In fact they proclaim, "A school with a low score on relational trust at the end of our study had only a one in seven chance of demonstrating improved student learning ... in contrast, half of the schools scoring high on relational trust were in the improved group" (p. 122).

Zand (1997) provides a good summary of the effects of trust and mistrust in an organization. "Trust frees people to be open, lifting relationships to new heights of achievement; mistrust shrivels people, destroying their relationship through frustration and rage. In problem-solving groups, like those in organizations, high trust increases openness and mutual acceptance. People accurately perceive the values and motives of others. They concentrate on the task at hand and do not distort what they hear. They recognize and use good ideas" (p. 97).

Conceptualizing Trust

Hoy and Tschannen-Moran (1999) identified five facets of trust when combined with the vulnerability premise, which resulted in trust being defined as "one party's willingness to be vulnerable to another party based on the confidence that the latter party is (a) benevolent, (b) reliable, (c) competent, (d) honest, and (e) open" (p. 7). They have found each facet to be an independent determinant of trust. However, because the facets are interrelated, when they exist together, they have a reinforcing effect upon the development of interpersonal trust.

Benevolence

Hoy and Tschannen-Moran (1999) explain that in order for a trusting relationship to develop, it is necessary that both partners be confident that the other will behave as expected and with benevolent motives (Lewicki & Sheppard, 1998). Further, Butler and Cantrell (1984) describe benevolence as the confidence that one's well being will be protected and not harmed by the trusted party.

Reliability

This trusting atmosphere is further enhanced by reliability, which is the ability to predict the consistency of behavior of another and the extent to which one can depend on another (Butler & Cantrell, 1984; Hosmer, 1995). Trust is built when reliability is combined with benevolence (Hoy & Tschannen-Moran, 2003). If others view the school leader's actions to be benevolent and consistent over time, then trust flourishes. Reliability alone is not adequate to build trust because the behavior of the leader can be predictably poor.

Competence

Hoy and Tschannen-Moran (2003) explain that benevolent actions are not enough when skills are necessary to fulfill the expectations of running the school effectively. In schools, teachers and parents depend on the competence of the principal and their colleagues to provide the leadership and resources to fulfill the educational mission. Competence allows others to believe that the leader is knowledgeable and can be trusted to assume responsibility for the direction of the school.

Honesty

Honesty characterizes the concept of character, integrity, and authenticity of the trusted party (Hoy & Tschannen-Moran, 2003). If a person can consistently be counted on to represent situations fairly and honestly, it makes a difference in whether or not he or she is trusted by others in the school community.

Openness

Openness strengthens the characteristics of benevolence, reliability, competence, and honesty (Hwang & Burgers, 1997). Tschannen-Moran and Hoy (2000) define openness as "the extent to which relevant information is shared; it is a process by which individuals make themselves vulnerable to others" (p. 9). When information is shared, it allows faculty members and parents to feel trusted by the school leader. As a result, they are more likely to live up to this outward sign of confidence by using the information appropriately. Without an atmosphere of openness, "others are left to guess about the information not shared and why" (Tschannen-Moran & Hoy, 2000, p. 9). This environment can stifle the flow of communication, which is necessary to build trust.

Hoy and Tschannen-Moran (1999) found that each of the five facets contribute to the development of trust, but individually may not be sufficient to maintain trust. When the five facets of trust combine in an organization, they have a reinforcing effect upon each other and the level of trust is strengthened. Therefore, these researchers argue that others were more willing to make themselves vulnerable under conditions of risk and interdependence when they feel confident that the leaders' actions are benevolent, reliable, competent, honest, and open.

A Model for Building Trust

Kochanek (2005) has developed a model for building trust, which integrates key components of both the Bryk and Schneider (2002) and Hoy and Tschannen-Moran (1999) frameworks. This model begins with the leader making deliberate attempts to ease the sense of vulnerability teachers and parents by encouraging low-risk exchanges. Kochanek (2005) reports that this is achieved by setting the stage with positive conditions. "First, the principal should communicate a belief system that puts the needs of students first, which provides a principle on which parents and teachers can easily agree. Second, the principal may need to reshape the faculty to rid the school of oppositional and incompetent faculty members who make positive discernments of respect, competence, and integrity less likely" (p. 19). After setting the stage for positive exchanges, the principal may further ease vulnerabilities by developing

an atmosphere of respect and personal regard. Kochanek (2005) claims these interactions have the following characteristics. "First, they are purely social in nature and often simply involve conversation. Second, they may be arranged around easily accomplished projects, and third, they come in the form of daily informal social interaction or special school events" (pp. 22–23). Kochanek (2005) contends that once low-risk exchanges are successfully underway, "the principal may create more formal structures that provide opportunities for more high-risk exchanges that are likely to promote positive discernments of competency and integrity" (p. 26). She suggests that processes like developing a school mission or pursuing a strategic plan of action could be included in this stage. This phase also includes deliberately shifting some control from administrators to teachers. The key is partnering school leaders and teachers in situations that give each party an opportunity to access the qualities of trustworthiness mentioned above. Such partnerships embedded in trust enable professional learning communities to thrive.

Professional Learning Communities

Professional learning communities are increasingly being recognized as viable structures to support ambitious reform and classroom instructional practices. In fact, DuFour and Eaker (1998) conclude that ongoing improvement efforts can succeed only when a community of colleagues supports each other through the inevitable difficulties associated with school reform.

Although a clear-cut definition of Professional Learning Communities (PLC) has not been universally agreed upon, Achinstein (2002) provides the following description, "A teacher professional learning community can be defined as a group of people across a school who are engaged in common work; share to a certain degree a set of values, norms, and orientations toward teaching, students, and schooling; and operate collaboratively with structures that foster interdependence" (pp. 421–422).

Crow, Hausman and Scribner (2002) conclude that professional communities can be thought of in terms of three concentric circles. In their synthesis of the literature, they argue that within the concept of a professional learning community there is an innermost circle, which is the community that exists "between teachers and children – where learning occurs. The outermost ring represents the nature of relationships between school personnel and the community at large" (p. 196). Mediating between these two rings, the middle ring represents relations among the professional staff within a school, including faculty and the principal.

Stoll et al. (2006) state, "The term professional learning community has shades of interpretation in different contexts. There is however, broad international consensus that the phrase suggests a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way, and operating as a collective enterprise. This notion draws attention to the potential that a range of people based inside and outside a school have to mutually enhance each other's and pupils' learning and school development" (p. 4).

After summarizing the international literature on professional learning communities, Stoll et al. (2006) conclude that there are five key characteristics of such communities:

- 1. "Shared values and vision directed toward all pupils' learning, relying more on collective power to reinforce objectives, rather than individual autonomy;
- 2. Collective responsibility for pupil learning, helping to sustain staff commitment, putting peer pressure on those who do not do their fair share and holding them to account, and easing teachers' sense of isolation;
- 3. Reflective professional inquiry as an integral part of work, including ongoing conversations about educational issues, frequent examination of practice with colleagues, mutual observation, and joint planning and curriculum development;
- 4. Collaboration in developmental activities directed toward achieving a shared purpose which generates mutual professional learning, reaching beyond superficial exchanges of help, support, or assistance; and,
- 5. Group as well as individual learning since professional learning is more frequently communal rather than solitary, and all teachers are learners with their colleagues" (p. 4).

Stoll et al. (2006) note that internationally professional learning communities have several common issues and noteworthy cultural differences, but all have considerable potential to improve schools.

Professional Learning Communities in the Context of Accountability

In order for accountability measures to be deemed by school leaders and teachers as "reflecting their personal choice and willingness to contribute to an expressed or implied outcome," they must be fully engaged professional learning communities that are imbued with a sense of trust for one another and a clear understanding of the "hill they are attempting to scale" (Elmore, 2001, p. 14). According to Elmore (2001, p. 14)

Performance targets for many low-performing schools are unattainable using their existing capacities. Most schools, even nominally high-performing schools, couldn't do this work using their existing capacities. To meet these performance targets, schools must develop successively higher capacities. Each new set of capacities addresses the next level of problem. Each level of increased performance carries its own new set of problems. Each new level of capacity requires a period of consolidation. Acknowledging the gap between capacity and performance in accountability systems isn't an argument for abandoning performance targets altogether. It is, however, an argument for bringing capacity-building measures into better alignment with performance measures in the design of accountability systems.

Building the collective capacity of the members of the school community highlights the true work of a professional learning community.

Trust as a Foundation for Professional Learning Communities

Louis (2006) reminds us, "the development of a PLC is not an innovation to be implemented but is a result of a culture change that will take years to create" (p. 8). She inquires, "Why does it take so long to implement a PLC?" Then, responding to her own question she replies, "One answer can be found in the increasingly robust research that suggests that trust is an element of organizational culture that is both critical and routinely overlooked—probably because administrators don't really want to face the music" (p. 9). Trust is the basis for "taken for granted" aspects of social interaction (Zucker, 1986) and lays the groundwork for social capital (Coleman, 1988). However, Louis (2006) laments, "the problem of trust is evident in educational settings" (p. 8).

Tschannen-Moran (2001) agrees, "Although collaborative processes are increasingly called for as part of reform efforts in schools, these processes will not come about in an authentic form if the people involved do not trust one another. Principals who do not trust their teachers will not share authority and responsibility. Teachers who do not trust one another will not give over a measure of their autonomy in order to collaborate with others. School personnel who do not trust parents will guard against giving them a real voice in decisions affecting the school. Conversely, as principals, teachers, and parents have opportunities for greater genuine participation, this may fuel a spiral of trust that generates more trust" (p. 315). In sum, Louis (2006) argues, "trust is a precondition for developing PLCs, but few schools (and probably fewer school administrators) have confronted the issue of how to improve this component of organizational functioning" (p. 9). If trust is a precondition for effective PLCs, then leaders would be wise to pay attention to the development of a high-trust culture.

The Principal's Role in Building Professional Learning Communities

The role of the leader is paramount in creating and sustaining professional learning communities. The September (2005) issue of The Center for Comprehensive School Reform and Improvement newsletter begins with authors Leithwood, Seashore-Louis, Anderson, and Wahlstrom (2004) making several important claims. "First, leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school. Second, leadership effects are usually largest where and when they are needed most. And, without a powerful leader, troubled schools are unlikely to be turned around" (p. 7). Finally, the authors stress, "many other factors may contribute to such turnarounds, but leadership is the catalyst" (p. 7). These statements make it clear that a strong leader is crucial in high performing schools as well as in schools where major changes are needed. To do this work, there is a growing consensus among educational researchers that school personnel must develop their capacity to function as a professional learning community (PLC) if schools are to become significantly more effective in meeting the increasing demands placed upon them (DuFour, 2001).

This work requires the principal and teachers to work together as they meet regularly to address the needs of their students. Morrissey (2000) has been studying the impact of schools implementing PLC groups on student achievement on behalf of the South East Development Laboratory (SEDL) for the past several years. She contends, "The development of professional learning communities in the SEDL studies hinged on the level of trust and respect that had developed within the school community" (p. 29). The word "hinged" is a strong validation of the importance of trust in such schools.

Bryk and Schneider (2002) report that, "Trust is a strong predictor of success. Trust alone won't solve instructional or structural problems, but schools with little or no relational trust have practically no chance of improving" (p. 132). Zand (1997) describes the effect that successful change has on an organization. He states, "Jointly planning and implementing a successful change is one of the most effective ways to use graduated, reciprocal increases in trust. If leadership and their people learn to trust each other by planning change together, and then enjoy the fruits of a successful change, they will develop greater confidence in each other's competence and reliability" (p. 129). Likewise, Fairholm (1994) notes, "Trust is a part of the process of change. Having trust in a person or thing, if seen as true, empowers us to change. Trust, therefore, is a principle of action, it focuses and intensifies our confidence in the other person or thing enough to let us act appropriately out of that trust" (p. 115).

The Principal as Builder of Trust

To meet the expectations outlined in current accountability models, schools need to increase their capacity to enable all students to be successful. Professional learning communities are one strategy to build such capacity. In order for professional learning communities to take root, trust must serve as the foundation. The ability to build a culture of trust is a characteristic of effective principal leadership. Principals and teachers need to embrace accountability initiatives that can serve as a catalyst to begin reform initiatives and serve to focus discussions in school-based professional learning communities. As Morrissey (2000) advises, "The Principal's role is a critical one, orchestrating a delicate balance between support and pressure, encouraging teachers to take on new roles while they themselves let go of old paradigms regarding the role of school administrator" (p. 43).

In addition, it is important to remember that according to Tschannen-Moran (2001) in order for schools to enjoy the benefits of greater collaboration, trust will be required. She concluded from her study involving 45 schools that "In schools where there was greater trust, there tended to be a greater level of collaboration. When trust was absent, people were reluctant to work closely together, and collaboration was difficult" (p. 327).

Several authors recommend beginning collaboration efforts like establishing professional learning communities by building trust (Mattessich & Monsey, 1997; McGowan, 1990). School leaders should begin the process by conducting an inventory of the existing level of trust in their school community and then be prepared to have an open and honest discussion with their faculty about the results. The dialogue can include these and other relevant questions: Why is trust important in our school community? What does the research say about trust? How do we create a trusting professional learning community? What evidence would we like to see and hear with regard to a trusting environment in our school? What evidence do we currently see and hear with regard to a trusting environment in our school? When school actors go through the process of evaluating their existing state and then collaboratively formu-

late their schools' desired state, the stage is set for improving the level of trust in their organization (Garmston & Wellman, 2004).

As goals are set and reached by participants in a professional learning community, accountability as a personal choice to meet the needs of all learners will become more evident. School leaders and teachers will become more willing to stand up and be counted on. This will in turn increase trust, which can truly be that powerful fulcrum which can assist educators in changing their work lives and outcomes for all students.

Biographical Notes

Pamela R. Hallam (EdD University of Utah) is an Associate Professor of Educational Leadership and Foundations at Brigham Young University in Utah. Her areas of academic interest include the role of trust in educational leadership; educational finance; mentoring/coaching productivity; and the role of the principal in building professional learning communities. Formally, Dr. Hallam served as a public school teacher, principal and district office administrator.

Charles Hausman (PhD Vanderbilt University) is an Associate Professor of Educational Leadership Studies at the University of Kentucky. His areas of academic interests include the educational consequences of school choice; program evaluation and data-driven decision-making; shared decision-making; and the role of the principal in school improvement. He has published 25 articles in refereed journals and edited books and presented extensively at national conferences.

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TEACHER MISBEHAVIOUR

Ramon (Rom) Lewis and Philip Riley

Unfortunately, researchers often tend to overlook teachers as a potential source of problems in the classroom

(Kearney, Plax, Hayes, & Ivey, 1991).

Introduction

The interpersonal process of teaching is complex, difficult and demanding requiring enormous patience, empathy, higher order thinking, parallel processing of multiple sources of information in real time and the ability to relate to dozens of "clients" at once. Despite these demands, teaching is not well paid and can be seen as a thankless task. It is, in short, even for the most dedicated and "natural" teachers, a highly stressful occupation at least some of the time. It is not surprising therefore that attrition rates amongst teachers with fewer than 5 year's teaching experience are very high (Centre for Innovative Thought, 2006). The way some teachers respond to the stress integral to their chosen profession is by interacting with students in a way that can be conceptualised as misbehaving. It is this kind of teacher behaviour which will be the focus of this chapter.

Classroom behaviour has been widely researched for well over 40 years. Teacher actions designed to facilitate the quality and level of student engagement and on-task behaviour, and therefore learning are plentiful. Less common are studies of teacher behaviour leading to increased levels of student disengagement in the classroom, and with education as a whole. Such behaviour can be characterised as teacher misbehaviour. Within this chapter, teacher misbehaviour will be defined and its prevalence and effects on students will be considered. In clarifying the causes of teacher misbehaviour, three potential theoretical explanations will be proposed. Finally the discussion will focus on the implications for teacher education and teacher support.

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Teacher Misbehaviour

It is only in recent times that teacher misbehaviour has been reported in English speaking countries as a possible cause of poor educational, somatic and emotional outcomes for students. A more substantial literature exists in non-English journals (see Poenaru & Sava, 1998; Sava, 2002, for a review of the non-English literature). There is even a term to describe it: *didactogeny*, a faulty education that harms students, physically, psychologically or educationally. There are different theories offered to explain why research on teacher misbehaviour is hard to find. The first is that classroom life is highly complex, with many interacting variables that are virtually impossible to isolate for research purposes using traditional research methods.

A second explanation for the lack of research into this area is that research aimed at identifying exemplary teacher practice is all that is needed to improve practice. Consequently, focussing on the positive aspects of teaching is more beneficial than focussing on the negative. However, assuming that unhealthy classrooms are simply those lacking the elements of healthy ones is worthy of exploration. If the assumption is wrong, researchers need to identify teacher misbehaviour in order to minimise its occurrence.

A third explanation for the lack of research into teacher misbehaviour has been put forward by Florin Sava (2002). He asserts that studying this phenomenon has been deliberately avoided by educational researchers in the West, for political reasons; claiming it as a taboo area for Western researchers.

Definitions: Teacher Misbehaviour

All teacher misbehaviour can be placed into two categories, based on *legality*. The misbehaviour either does or does not break the existing law(s) of the land in which it takes place. This is a relatively straightforward categorisation. Illegal teacher misbehaviour usually relates to physical and sexual misconduct, abuse and harassment, and theft or related financial law breaking. Although it is this kind of misbehaviour that is most likely reported in Newspapers, and such misbehaviour undoubtedly has a significant detrimental impact on students, it affects relatively few. Such misbehaviour will therefore not be discussed in this chapter. In contrast, the analysis will concentrate on teacher misbehaviour which is more frequent, occurs in classrooms and, although legal, affects many students adversely. It is complex behaviour and as will be shown later, includes both automatic irrational responses as well as reasoned responding.

In general, classroom-based teacher misbehaviour can be conceptualised as acts of commission or omission. The first of these refers to what teachers do to students that they ought not do, and the latter to what teachers should but fail to do. These kinds of misbehaviour can be either consciously or unconsciously motivated. Table 1 provides a framework which allows any teacher misbehaviour to be recorded according to the criteria identified above. To highlight the range of teacher misbehaviour that can be found in classrooms, behaviours exemplifying each cell of Table 1 will be outlined.

			Legality	
			Legal	Illegal
Motivation	Commission	Conscious	1	5
		Unconscious	2	6
	Omission	Conscious	3	7
		Unconscious	4	8

Table 1 Teacher misbehaviour

Examples of teacher misbehaviour include a teacher who yells in anger at a misbehaving student (cell 1), or becomes physically abusive with or without student provocation (cell 5). Cell 2 represents a misbehaviour that might otherwise be described as cultural insensitivity, or inappropriate behaviour for a given context. This characterisation assumes that the teacher is unaware of the situation. For example, a teacher who demands of an Australian indigenous student "look at me when I'm talking to you", as a sign of respect, is misbehaving culturally, and demanding that the student also behave inappropriately, when the student's culture dictates that respect is offered to the teacher by not making direct eye contact. Misbehaviour exemplifying cells 3 and 4 are as follows. Imagine that during a class discussion student X has raised his hand repeatedly, indicating that he wishes to join the conversation. The teacher however does not call on X to speak because X is a student whom the teacher has labelled a trouble maker. Such misbehaviour belongs in cell 3. If the teacher did not "notice" X's raised hand, the misbehaviour is better placed in cell 4. Cells, 6, 7 and 8, are exemplified by a teacher who fails to warn students of a potential danger, such as chemical reactions in a science class, or physical dangers in a playground, not supervising students correctly during yard duty, etc., thereby not preventing, rather than causing, an accident. There are many cases in law where teachers and schools have been found guilty of negligence for such behaviour. If the failure to warn the students is the result of a conscious decision by the teacher, the misbehaviour belongs in cell 7. In contrast, if the lack of warning is due to an "oversight" then the misbehaviour fits cell 8. Behaviours in cell 6 are hard to define, because acting in an illegal manner towards students is unlikely to be unconscious, unless the teacher is unaware of the law.

The dynamics of how teacher misbehaviour occurs is summarised in Fig. 1, which provides a visual representation of a single act of teacher misbehaviour. An understanding of this mechanism will be become significant when discussing ways in which teachers may be assisted to reduce the frequency of misbehaviour.

Assume that a student acts appropriately or inappropriately (X), and the teacher observes this behaviour (Ob). He or she may or may not attend to the student's behaviour (Att). The emotional response engendered in the teacher caused by attending to the behaviour affects the level of emotional dissonance experienced. This is generally related to a measure of the gap between the behaviour the teacher witnessed and the behaviour the teacher would perceive as ideal. The extent of emotional dissonance determines the extent of the delay which will occur before



Fig. 1 The dynamics of a single act of teacher misbehaviour

the teacher's reasoned response emerges. If the time taken until the teacher's reasoning "kicks in" is sufficiently short, he or she can evaluate what would have been the unmediated response before it occurs. In such a case the teacher responds intentionally (Response) rather than automatically (Unmed Reactn) when he or she misbehaves (MB). In contrast, with an unmediated (automatic) reaction, cognition is used to construct a "reasonable rationalisation" of the teacher's behaviour post facto. Thus, reactive misbehaviour is conceptually distinct from reasoned misbehaviour, albeit that it may appear indistinguishable to an observer witnessing the event.

A couple of examples will usefully exemplify this dynamic. Assume that student X makes a rude comment about the teacher to a classmate. This is done quietly enough to seem private but is loud enough for the teacher to hear. It is intended to hurt or offend the teacher. After observing and attending to this behaviour, the teacher may feel that her authority has been undermined to such an extent that running the class may become difficult or impossible in the future. This raises her anxiety level. If the teacher concludes that "This situation must be dealt with now", and thinks that "I can't let the students rule the class: chaos will reign", she may respond by physically threatening the student by yelling at him from only a few centimetres distance, stating that she "heard that". She may then demand that he publicly repeat the comment (in the hope that the student will back down) and perhaps send the student from the class.

However, if the teacher believes that student X is from a troubled background, is consistently failing assessments, consequently feels "dumb" and resentful of schools and teachers, and has attempted the same trick on a number of teachers, there is little emotional dissonance. Such behaviour is to be expected.

An example of an unmediated response is one which draws from the work of Joseph E LeDoux (1996) in which a key component of the emotional centre in the brain, the amygdala, plays a significant role. When the level of anxiety provoked in the teacher is strong enough, the signals that have caused this are sent directly

to the amygdala which begins a reaction *before* the signals have been processed in the cortex. This cognitive processing follows 12–15 ms behind. This can be witnessed when a teacher pushes the chest of a student hard after the student directly challenges the teacher by, for example swearing directly at him or her. The teacher's response is automatic. It is not consciously intended. The push is almost over before the teacher is aware of his action. In order to appear rational the teacher must find a reason for the action to justify to himself and others why he did what he did. He may also feel dreadful afterwards, knowing with the benefit of hindsight that he misbehaved.

In summary therefore, the focus of this chapter is on any classroom-based behaviour by teachers directed towards students as a result of observations and judgements made or not made, after observing and attending to student behaviour.

The most commonly reported misbehaviours that result in students becoming fearful or resentful of their teachers and disengaged from the subjects taught by them are:

- · excessive negative criticism,
- · embarrassment and humiliation, and
- yelling in anger.

As indicated above, in the non-western literature the term *didactogeny* includes unintentional harm caused by teachers using inappropriate educational strategies and techniques to maintain classroom control. This definition covers both acts of omission and commission, as well as conscious and unconsciously driven behaviours.

In applying the definition derived above, it can be argued that a teacher who observes but fails to attend to pro-social behaviour by a "bad" student (for example arriving for class on time) is misbehaving via an act of omission. Similarly, a teacher who observes and attends to "good" behaviour by "bad" students but continually fails to acknowledge it, is also misbehaving by omission. In contrast, when a teacher, without fail, observes and punishes the same "bad" student's unacceptable behaviour he or she is misbehaving via commission. Even a single act of yelling in anger, using cutting sarcasm or name-calling is misbehaviour by commission.

Research conducted on student interpretations of teacher punishments shows that when the teacher moves from private to public discipline of an individual student, the whole class loses the focus of the lesson. The student learning shifts from the lesson content to the emotions elicited by negative teacher–student interactions. The stress caused to the students during such incidents tends to provoke typical fear responses varying from increased arousal and anxiety to fight/flight/ freeze (Rosenzweig, Leiman, & Breedlove, 1999), or tend and befriend (Taylor et al., 2000) responses in extreme cases. Teachers are a significant source of student distress in the classroom and "miscreant" students are not the only ones to suffer from inappropriate discipline strategies and practices; there is a ripple effect related to public disciplining of students which extends to the whole class. What then is the prevalence of teacher misbehaviour that harms children medically, psychologically or educationally?

Prevalence of Teacher Misbehaviours

Before outlining the prevalence of teacher misbehaviour it is useful to describe the context in which it is occurring. Teachers, on average, report moderately high stress levels. Elevated stress leads to inappropriate responding in many situations; including classrooms. Teacher stress is caused by a range of factors but classroom management difficulties nearly always appear in the top three. Other commonly cited stressors include lack of administrative and collegial support, personal problems, health issues, sleep difficulties, or compound causes (Friedman, 2006). Approximately one third of almost 500 teachers in a recent Australian study report moderate to major levels of stress as a result of classroom discipline issues (Lewis, 2006). Many however many find this stressful on a continuing basis, and chronic stress is known to increase the chances of subsequent anxiety disorders and depression (Rosenzweig et al., 1999).

The teachers who go on to misbehave as a result of stress are not clearly identified in the research. This is partly due to the definitional problems of misbehaviour mentioned above. Most researchers in the field agree that student reports of teacher misbehaviour are a reliable indicator of prevalence. Almost half of selected samples of secondary school students in at least three countries report exposure to teacher misbehaviour at least sometimes (Lewis, Romi, Qui, & Katz, 2005), with negative impacts on students (Lewis et al., 2008). Given the numbers of teachers who are reporting distress associated with classroom misbehaviour and teachers' responses to it, these data are cause for concern and the fact that it has not been widely researched is equally problematic. At the extreme end, Hyman and Snook (1999) estimate that 1-2% of students develop teacher induced post-traumatic stress disorder. Many more develop somatic complaints and suffer long-term psychological distress as a result of teacher misbehaviour (Poenaru & Sava, 1998; Sutton & Wheatley, 2003).

To summarise, the incidence of teacher misbehaviour is common enough to cause concern within the education community. Despite definitional problems and difficulties with obtaining reliable data, the prevalence and intensity of teacher misbehaviour is widely acknowledged by both teachers and students. It would appear to be conceptualised differently by teachers and students with discrepancies in reports of prevalence, intent and consequences. Nevertheless, as reported above, teacher misbehaviour causes students somatic, psychological and educational distress, ranging from mild distress to long-lasting and deep seated problems. It also causes teachers distress, at least in some cases, adding to the cycle of stress leading to misbehaviour leading to more stress. Many teachers report that they do misbehave, at least sometimes, and some report that they feel dreadful afterwards (Lewis et al., 2005). Nevertheless they continue to misbehave, suggesting it may not be a set of behaviours that is always within their conscious control. In the next section three conceptualisations of why teachers misbehave will be presented that may shed light on why the problem exists and what might be done to remediate it.

Conceptualisation of the Problem

The following theories offer new ways to conceptualise the issues surrounding teacher misbehaviour. While each is distinct, there are many common features and each has a slightly different orientation towards the issue. The areas of overlap may prove to be more useful than the differences, however for the sake of clarity they will be outlined individually first, then the relative strengths and weaknesses of each will be discussed.

Attribution Theory

Attribution theory is quite a simple theory. At its core, attribution theory assigns internal or personal attributions to people as an explanation for external actions and behaviours. For example teachers who yell at a student to "be quiet" because of a classroom disruption are using attribution theory if they think that the student is a "trouble maker" (negative other attribution) or "I don't deserve to be treated like this" (positive self attribution). Multiple attributions are possible for any single act or behaviour. The attributions go beyond the actual behaviour to the make up of the personality of the student and the teacher. The essential elements of attribution theory in terms of how behaviours are shaped are that both the person making and the person receiving the attribution are thinking about the situation at hand and the attribution addresses internal factors of the person rather than outward behaviour. "She did this because she is a good person". "He did that because he is a bad person". This form of labelling may be used by teachers to reinforce pro-social behaviour but can also be used to label students with personalities that deserve to be punished, or at least to justify the teacher's own misbehaviour. The theory places the blame for a teacher's misbehaviour on the students because the teacher is only reacting to provocations. According to this explanation, students who deny a teacher's legitimate authority by acting in a way which they clearly understand is both irresponsible and unfair, deserve (and may well need) to be put in their place. Any resistance from challenging students justifies an angry response from the teacher. Similarly, any class that acts in a manner that is clearly irresponsible deserves to be punished as a group. Even if there were a number of students who weren't directly involved in the misbehaviour "they didn't try to prevent it". The idea is that "no one can be expected to cope with these kinds of kids". Teachers are forced to use aggressive response techniques with such children because kids like this don't, and can't be expected to, understand, appreciate or respond to more reasonable classroom management techniques.

In summary, teachers who think in terms of attribution theory will see the reason for their own misbehaviour residing in the challenging students' nature or upbringing. Consequently, when a student exhibits behaviour that teachers find confronting and challenging, some respond by giving the student what "kids of this kind" deserve. This mindset discourages teachers from attempts to shape more pro-social behaviour in their students and may lead to a sense of powerlessness in the teacher. This in turn will have an effect on the teacher's stress levels.

Efficacy Theory

A second theoretical explanation for why teachers misbehave relates to the levels of efficacy the teachers perceive in the aggressive response techniques or in themselves as people. Efficacy theory was developed from the social learning theory of Albert Bandura (1973). It allows for two alternative explanations for teacher misbehaviour; high and low perceived efficacy of self and other, and the efficacy of the management techniques the teacher employs in the classroom.

Low Perceived Self-Efficacy

This explanation assumes that when teachers see their resources (emotional and professional) as inadequate to deal with the management situation they confront, they feel incompetent and unable to cope. This explanation is based on a teacher's defensive behaviour, and may be unrelated to student provocation. When confronted with a classroom management situation which *they* perceive as very stressful, teachers move from focusing on what is best for students to being relatively more concerned with their own needs. At these times, teachers may act aggressively to protect themselves, even when this comes at the students' expense. This style of responding is similar to a fight/flight/freeze or tend/befriend response (Taylor et al., 2000), but is expressed as aggression aimed at students.

High Self-Efficacy

Conversely, some teachers may become aggressive with students because they see this style of responding as an efficient way of dealing with challenging students. These teachers don't feel compelled to use misbehaviour out of a need to protect themselves but intentionally choose techniques such as sharp sarcasm because they see them as useful. Such techniques do not represent misbehaviour for the teachers, but rather a method of control which they perceive as efficient and effective. This explanation assumes that all teachers' misbehaviour is a rationally driven response to inappropriate student behaviour.

Attachment Theory

Attachment theory is the most complex theory that may account for teacher misbehaviour. According to attachment theory, the fundamental difficulty that leads to misbehaviour from teachers lies in the underlying attachments formed between teachers and students rather than in student provocation of the teacher. Proposed by John Bowlby (1975, 1981, 1982) and developed by subsequent researchers since, attachment "styles" of the teachers are likely to predict the management techniques employed; both appropriate and inappropriate. The theory predicts that teachers who are insecurely attached will be more likely to behave aggressively in classrooms as they possess less well developed emotional resources to deal with relationship difficulties.

Like efficacy theory, attachment theory is a two-person model of interpersonal interactions. When applied to the classroom it is the teacher's *internal working model* of self and other that determines the level of aggressive behaviour by teachers. The concept of the internal working model is crucial to the understanding of adult attachment and will be outlined in more detail below, however it is important to understand the nature of the student/teacher relationship in attachment terms first.

The Teacher-Student Relationship

The dyadic, reciprocal, and therefore complex, nature of adult attachment theory offers a model of reciprocal rather than unidirectional attachments formed by teachers and students. Dyadic attachment, where each member of a dyad is both care-giver and care-seeker, is proposed as a more accurate model for understanding the relationships between student and teacher.

In attachment terms, the student-teacher relationship is a reciprocal relationship. A teacher needs students in order to have a professional identity. Students need teachers to educate and care for them. In attachment terms this makes both the teacher and the students equally vulnerable to attachment distress. However, students don't always need teachers, and some insecurely attached students will always reject teachers who attempt to negotiate and build relationships with them. Even "good" students don't always need the teacher: they can study effectively without a teacher, particularly if the task is clear. The theory suggests that the teacher's unconscious reaction to this perceived (or actual) rejection may be crucial in understanding why they may respond aggressively.

Primary Attachments and the Inner Working Model of Self and Other

Bowlby (1982) detailed the importance of the first relationship as a determinant of subsequent relationships. He argued that caregivers act as emotional role models, helping or hindering the children in their ability to respond appropriately to the myriad situations that arise during development from child to adult. The caregiver's ability to assist in the child's development provides an emotional scaffold. These scaffolds become internalised as the child learns to respond to the world through repeated consistent or inconsistent modelling by the caregivers: thus the internalisation of experience or *internal working model* is formed. The critical period for the formation of the internal working model is between the ages of 6 months and 3 years. Once constructed, it is the internal working model that orients the child to the world and which is carried into adult life.

For example, children who were not well cared for by their primary attachment figure are more likely to become insecurely attached by the age of 3 years. Thus they develop an internal working model of others as unreliable, and develop a model of self as either over-dependent or avoidant of affection. As they grow towards an insecurely attached adulthood they learn not to trust both the intentions of others and their own needs. Approximately 40% of adults are thought to be insecurely attached

(George, Kaplan, & Main, 1984). It is reasonable to expect that some of these people will find their way into classrooms as teachers.

The insecurely attached teachers will have carried that model into the classroom both as a student and as a teacher. They will have experienced many confirmatory events of being let down in relationships, and will expect their students to also let them down. Therefore when a student lets them down by misbehaving, doing unexpectedly poorly on a test or losing homework, the teacher's inner working model is confirmed as accurate. Therefore the world and the student remain predictable for them. However, the internal working model is likely to also include a dislike of being let down. Whilst the insecure adult has learned to distance him or her self from attachment needs, they still exist and can be triggered in times of stress, fatigue or illness. Bowlby argued that this often precipitates a desire to punish the person who is perceived as letting them down, which he termed separation protest. As such, these teachers' inner working models operate in conflict with a secure classroom environment producing an unconscious emotional dissonance in the teacher, even when the class is running smoothly. These attachment processes remain largely outside the teacher's awareness unless his or her vulnerability at such times is raised through insight. Because of the relative complexity of attachment theory, a paradigm for understanding the mechanics of the theory in practice will be presented.

Whereas Fig. 1 above provided a visual representation of a single act of teacher misbehaviour, Figs. 2 and 3 attempt to show graphically the complexity of such behaviours and the antecedent aspects of any single behavioural act by a teacher that would be the case if attachment theory were the primary motivation. This is done by representing the priming of the teacher's and student's responses due to previous experience via their internal working models. An understanding of this



Fig. 2 The cycle of teacher–student interactions leading to conscious misbehaviour by the teacher, student or both. StudAnt = Student anticipation of teacher behaviour, TeachAnt = Teacher anticipation of student behaviour, X = Student behaviour, Ob = Teacher observation of student behaviour, Att = Teacher's attention directed towards the observed behaviour, Int = Teacher's interpretation of student behaviour, Reason Intn = Teacher's consciously motivated and reasoned misbehaviour



Fig. 3 The cycle of teacher-student interactions leading to unconscious misbehaviour by the teacher, student or both. StudAnt = Student anticipation of teacher behaviour, TeachAnt = Teacher anticipation of student behaviour, X = Student behaviour, Ob = Teacher observation of student behaviour, Att = Teacher's attention directed towards the observed behaviour, Int = Teacher's interpretation of student behaviour, UnMed Reactn = Teacher's unconsciously motivated response/reaction, Reason Intn = Teacher's consciously motivated and reasoned behaviour, MB = Teacher misbehaviour

mechanism will be become significant when discussing ways in which teachers may be assisted to reduce the frequency of misbehaviour.

In Fig. 2 the pathways follows a student act (X) which the teacher observes (Ob). At this point, the teacher pays attention to the student's behaviour (Att). The teacher may alternatively choose not to attend to the observed act or attention may be blocked by unconscious perceptual defence mechanisms (Dixon & Henley, 1991). The emotional response engendered in the teacher caused by observing the behaviour affects the level of emotional arousal and dissonance experienced, whether attended to consciously, or unconsciously assimilated.

An example of each type of reaction might usefully exemplify this dynamic. In the situation where a teacher misbehaves through reasoned action, there will still be an unconscious component of motivation driving the actions. Therefore, if student X comments rudely about the teacher to a classmate, quietly enough to seem private but loud enough for the teacher to hear, the teacher will rightly perceive this as a threat to his or her authority. For the securely attached teacher this is seen as the student's problem and may exercise the teacher's curiosity in an effort to understand why the student acted this way at this time. However, if the teacher is tired, ill or stressed or already anxious about something else, a less professional response may be triggered by the attachment behavioural system. In this scenario the same comment from the student is perceived very differently. This time the threat to the teacher's authority is also likely to become an unconscious threat to his or her professional identity and as such raises the level of separation anxiety: "Who am I if I am not a teacher? Teachers manage classes and I can't manage this class?" The threatened separation is from the class, and also potentially from colleagues if the teacher imagines that they too may perceive she or he is incapable of managing the class and may consequently distance themselves from him or her. The comment by the student was intended to hurt or offend the teacher, which it does, but in a manner very different from that discussed in the previous example. Once teachers' anxiety levels are raised beyond their set points for separation protest, the attachment behavioural system is triggered and separation protest is inevitable (Bowlby, 1975). If teachers conclude that "This situation must be dealt with now" as a means of lessening the anxiety, and think that "I can't let the students rule the class: chaos will reign", they will respond by using separation protest behaviours that have been successful in the past, such as, physically threatening the student, yelling at the student, becoming sarcastic, or paradoxically, removing the student from their presence. These behaviours are designed to stop the threat to self by creating fear of separation in the other. This of course can have a disastrous effect on some students if the teacher's behaviour activates their attachment behavioural system and they respond with more protest. One can see, when looking at such situations through the lens of attachment that the situation can get out of control very quickly with both teachers and students in separation protest mode.

Conclusions

Teacher stress leading to misbehaviour is a cause for concern within the education community. It leads to many negative short and long term consequences for students including somatic, psychological and educational distress. It also causes teachers distress, at least in some cases. The prevalence and intensity of teacher misbehaviour is acknowledged by both teachers and students, although students report almost double the incidence. Even though teachers report that they misbehave and frequently feel dreadful afterwards they continue to misbehave. Interventions aimed at reducing levels of teacher misbehaviour are needed. These may not come from studying the behaviour of exemplary teachers. More recently various psychological conceptualisations are being applied to the issue in the hope of better understanding a very complex set of interpersonal interactions.

The difficulty for those attempting to assist teachers who wish to reduce the frequency with which they misbehave is to determine what kind of intervention is most effective. If Efficacy theory drives their thinking then an appropriate program is one which emphasises skill development. Professional development of this kind for teachers attempting to deal with difficult students often report very positive results, but Lewis and colleagues (2005) note that unless the teachers feel supported the more productive techniques learned do not always last. Consequently school-wide systems

of support for staff, involving discussions with and coaching by their colleagues may be integral to long-term success.

If one were to develop programs of intervention based on Attribution theory the focus would be on challenging teachers' inappropriate constructions of themselves and their students. With regard to themselves, teachers' constructions may be challenged by facilitating reflection on self-defeating beliefs (Ellis, 1980, 2000). Negative characteristics attributed to students may be confronted by allowing teachers to engage in discussions with colleagues who hold contrasting perceptions of challenging students. These are often Phys Ed, Technology or Art teachers. It may also be useful for teachers to visit the work places where challenging students hold responsible positions or their homes.

Professional development based on the assumption that Attachment theory explains teacher aggression would focus on helping teachers gain insight into their personal *internal working model* of relationships through discussion of their classroom and life experience. As the underlying cause of misbehaviour is thought to be loss of control of the self, rather than loss of control of the student or class, the discussion focuses on helping the teacher deconstruct and reconstruct their professional identity through insight-navigated reflection. This technique is used to help the teacher create a new, professional internal working model of relationships for a specific context: the classroom. The discussants attempt to identify the teacher's misbehaviour trigger points and allow the teacher to develop strategies to deal with these as flexible modes or orientations towards students rather than teach techniques for external behaviour management, as efficacy theory would.

Interventions that help teachers to understand their unconscious motivations for their attributions, efficacy and attachment styles are all proving successful to a greater or lesser extent, but the problems of misbehaviour are multifaceted, complex and contextual. We suggest that no single theory will explain all of teacher misbehaviour, but it is time for researchers to take on the issues in multifaceted ways so that the cycle of teacher aggression and student confrontation may be broken.

Just as Bowlby strongly advocated support for mothers in order to protect children, it can be argued that to really look after students and help them reach their full potential, one must first more fully understand their teachers.

Biographical Notes

Ramon (Rom) Lewis started his career in education as a teacher of Physics, Math's and Science, before moving into the University sector. After 16 years he returned to the classroom to teach full-time on a sabbatical and part-time for another 7 years, to examine the gap between theory and practice. His research publications have focussed on a range of classroom management issues. These include: *What strategies do students, parents and teachers prefer? What do teachers do to manage students' classroom behaviour?* and *How do students react to teachers' disciplinary techniques?* Recently he has published replications of his Australian research conducted

in Israel and China. For over 10 years Ramon has been working with staff in groups of schools to minimise teachers' use of aggressive management strategies, such as yelling in anger, attacking sarcasm and group punishment. In this way both students and teachers experience less stress at school, and outcomes for all are improved.

Philip Riley has had a long career in schools. He has taught every year level from Grade 2 to VCE, and spent the last 4 years of his school career as Deputy Principal and acting Principal. Whilst continuing to teach full-time, Philip trained as a psychologist part-time. Beyond the school setting, Philip spent 2 1/2 years at La Trobe University where he taught Mathematics, Educational Philosophy, Person-Centred Teaching and Counselling skills, Holistic Education and Psychology at post graduate level, mainly to pre-service primary and secondary teachers. Philip now teaches in the Faculty of Education at Monash University in the Master in School Leadership and the Master in Organisational Leadership programs, Mentoring 1st Time Principals and Leading for Professional Learning. Philip has presented his work on attachment theory in education at international education and psychology conferences and has been published in the refereed proceedings. Philip also works as a consultant in schools undergoing change processes, experiencing difficulties with HR, classroom discipline, and leadership coaching. He is a registered psychologist.

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SCHOOL ADMINISTRATOR MISTREATMENT OF TEACHERS

Joseph Blase

Introduction

This chapter presents an overview of major concepts, typologies, and theories of workplace mistreatment-abuse as well as findings on abusive behavior and effects. This is followed by summaries of findings from two studies of school principal mistreatment-abuse of public school teachers. The remainder of the chapter consists of a brief methodological critique of extant related research, suggestions for future research, and implications for teacher education.

During the past 15 years, there has been a proliferation of international scholarly research and theoretical models focusing on the problem of workplace mistreatmentabuse. Significant work has been produced in countries such as Finland, Sweden, Norway, France, Great Britain, Australia, the United States, and Canada. Legislation and organizational policies addressing the workplace mistreatment-abuse problem have also emerged in several of these countries (e.g., Blase & Blase, 2003a; Einarsen, Hoel, Zapf, & Cooper, 2003; Keashly, 1998; Rayner, Hoel, & Cooper, 2002).

In parallel fashion, a plethora of studies and development of intervention strategies have been published in the field of education regarding the problem of peer bullying (i.e., among children and adolescents) throughout the world in countries such as Ireland (O'Moore, 1999), Holland (Junger-Tas & Van Kesteren, 1999), Australia (Slee & Rigby, 1994), Great Britain (Boulton & Smith, 1994; Wolke, Woods, Stanford, & Schultz, 2001), New Zealand (Sullivan, 2000), Canada (Kashani & Shepperd, 1990), Norway (Olweus, 1991) and the United States (Crick & Bigbee, 1998; Orpinas & Horne, 2006). There has also been limited research on sexual harassment of students by teachers and other professional staff (e.g., Shakeshaft & Cohan, 1995).

Glimpses of school administrator mistreatment-abuse of teachers have appeared in stress studies (Adams, 1988; Barnette, 1990; Blase, 1984, 1986; Diehl, 1993; Dunham, 1984; Dworkin, Haney, Dworkin, & Telschow, 1990) and micropolitical studies (Ball, 1987; Blase, 1990, 1991b; Blase & Anderson, 1995). In essence, these areas of inquiry have provided provocative but limited clues about school administrator mistreatmentabuse problems. To date, two studies of school principal mistreatment-abuse of teachers have been published, both in the United States (Blase & Blase, 2002, 2003a, 2003b;

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Blase, Blase, & Du, 2006). This is particularly disconcerting in light of the fact that large-scale, cross-occupational studies in Norway (Matthiesen, Raknes, & Rokkum, 1989), Sweden (Leymann, 1990), Ireland (Irish Taskforce on the Prevention of Workplace Bullying, 2001), Great Britain (Hoel & Cooper, 2000), and Australia (Queensland Government Workplace Bullying Taskforce, 2002) indicate that teaching is one of the highest risk occupations for mistreatment-abuse.

Concepts

During the past decade and one half, a myriad of important concepts have been produced to denote the phenomenon of workplace mistreatment-abuse, notably, nonviolent forms of abuse. For example,

- Leymann (1990) defined *mobbing* as "hostile and unethical communication that is directed in a systematic way by one or a number of persons toward one individual" (p. 120) and that occurs frequently over an extended period of time.
- Einarsen and Skogstad (1996) used the term *bullying* to refer to "... harassment, badgering, niggling, freezing out, offending someone ... repeatedly over a period of time..." (p. 191). In their view, bullying exists only in asymmetrical (unequal) power relationships.
- Björkqvist, Osterman, and Hjelt-Bäck (1994) defined *work harassment* as "repeated activities, with the aim of bringing mental (but sometimes also physical) pain, and directed toward one or more individuals, who for one reason or another, are not able to defend themselves ..." (p. 173).
- Price-Spratlen's (1995) definition of *mistreatment-abuse* refers to behavior that is "unwelcome, unwanted, unreasonable, inappropriate, excessive, or a violation of human rights" (p. 287).
- Keashly's (1998) comprehensive conceptualization of *workplace emotional abuse* incorporates many important elements discussed in the extant literature. *Emotional abuse* is defined as "hostile verbal and nonverbal behaviors ... directed at gaining compliance from others" (p. 85). Abusive behavior is perceived as intending to harm a target, unwelcome and unwanted, violating individual rights and standards of conduct, and a pattern of abuse (not a single event) that occurs within an unequal power relationship and harms the target.

A handful of useful concepts have also been created that refer directly to administrator (i.e., superior, boss) mistreatment-abuse of subordinates.

- *Abusive disrespect*, a concept developed by Hornstein et al. (1995), describes transgressions by superiors including, but not limited to deceit, coercion (e.g., threats of excessive harm), selfishness (e.g., scapegoating subordinates), inequity (e.g., favoritism), cruelty (e.g., name calling, ad hominem attacks) and disregard (i.e., displaying a lack of consideration).
- Ashforth's (1994) term, *petty tyranny*, describes "an individual who lords ... power over others ... acts in an arbitrary and self-aggrandizing manner, belittles subordinates, evidences lack of consideration, forces conflict resolution, discourages initiative, and utilizes noncontingent punishment" (p. 772).

- *Abusive supervision*, a term developed by Tepper (2000), emphasizes subordinates' perceptions of "hostile verbal and non-verbal behaviors, including physical contact" (p. 178).
- Blase, Blase, & Du's working definition of *administrative mistreatment-abuse*, developed inductively from exploratory studies of teachers' perspectives of school principal abuse, is inclusive (Blase & Blase, 2002, 2003a, 2003b; Blase, Blase, & Du, in press). This concept identifies a pattern of verbal, nonverbal, and physical behaviors (excluding physical assaults) that usually occurs over extended periods of time and results in various forms of harm, including physical-physiological, psychological-emotional, professional-life and personal-life harm.

It is important to mention that many definitions of workplace mistreatment-abuse exclude status-based forms of mistreatment (e.g., racial and sexual harassment). However, teachers' experiences of abuse suggest an interconnectedness and similarity of these forms of mistreatment-abuse and status-blind forms of mistreatment-abuse; thus, they are connected in all forms of status-blind mistreatment-abuse included in Blase et al. (2006) definition of administrative mistreatment-abuse. Needless to say, the formal power differential between an administrator and a victimized teacher is a fundamental element of this definition of workplace mistreatment-abuse. Arbitrary lengths of duration of abuse (e.g., Leymann's, 1990, definition of mobbing requires at least 6 months of abuse) are rejected by Blase et al. approach because their earlier study demonstrated that even a few weeks of repeated harassment consisting of a few relatively serious forms of mistreatment-abuse (e.g., public humiliation vis-à-vis students and colleagues, transfer to a teaching assignment for which a teacher is unprepared, and an unwarranted negative annual evaluation) can have long-lasting and devastating effects on teachers (Blase & Blase, 2002, 2003a, 2003b).

Indeed, the appropriateness of a definition of mistreatment-abuse will vary according to the context. Generally speaking, however, frequency and duration of workplace mistreatment-abuse are considered critical elements of most definitions of mistreatment-abuse, while unequal formal power relationships and a perpetrator's intentions are considered much less critical (Blase & Blase, 2002, 2003a, 2003b; Einarsen et al., 2003; Einarsen & Skogstad, 1996; Irish Taskforce on the Prevention of Workplace Bullying, 2001; Rayner, 2000; Westhues, 2004).

Typologies of Abusive Behaviors

Several useful typologies, developed from theoretical and empirical work in the general area of human aggression and workplace mistreatment-abuse in particular have been routinely applied to classify abusive behaviors in organizational settings. Buss's (1961) seminal work on aggression has served as a basis of many approaches used in the area of workplace mistreatment-abuse. Buss identified three dimensions of aggression: physical-verbal, active-passive, and direct-indirect. Physical aggression refers to overt physical behavior. Verbal aggression includes the use of words to harm a target. Active aggression reflects the performance of a behavior, and passive aggression refers to withholding a behavior from a target to induce harm. In direct aggression, harm is conveyed directly to the target, and in indirect aggression, harm is delivered to

another person or thing valued by the target. To illustrate, a principal who criticizes a teacher to his or her face is an example of verbal, active, direct, aggression, whereas spreading false rumors about a teacher to other teachers and parents illustrates verbal, active, indirect aggression. A principal who stonewalls a teacher's request for needed funds and equipment exhibits verbal, passive, direct aggression; and a principal who fails to dispel a false rumor about a teacher with his or her district office supervisor demonstrates verbal, passive, indirect aggression. Physical aggression (i.e., physical violence) has not been the focus of theoretical or empirical research on workplace mistreatment-abuse; however, some scholars have used this category of aggression to describe acts such as stealing or damaging an employee's equipment or personal items.

Baron and Neuman's (1996) three-factor model of aggression – hostility, obstructionism, and overt aggression – was derived from Buss's (1961) work. Manifestations of *hostility* refer to verbal expressions (e.g., criticizing a target's achievements, yelling at a target, creating false and disparaging rumors about a target, producing unwarranted reprimands) and symbolic gestures (e.g., sneering/grimacing, the silent treatment, obscene physical gestures). *Obstructionism* refers to behavior that is passiveaggressive (e.g., failing to respond to phone calls, e-mails and memoranda; withholding needed resources; appearing late for meetings called by the target; failing to explain a target's plans to upper-level administrators). *Overt aggression* describes physical violence or threats (e.g., physical attacks or assaults, destroying a target's mail, theft or destruction of property). Note that Baron and Neuman's typology is one of the few that includes acts of physical violence.

Robinson and Bennett (1995) and Ryan and Oestreich (1991, 1998) have also created useful typologies of workplace mistreatment-abuse. Robinson and Bennett conceptualized deviant organizational behavior along two dimensions. First, minor types of deviance comprise two subtypes: productive deviance (e.g., leaving early, taking excessive breaks) and political deviance (e.g., spreading rumors, favoritism). Second, more serious types of deviance include property deviance (e.g., damaging resources and equipment) and personal aggression (e.g., endangering subordinates, verbal abuse, sexual harassment).

Ryan and Oestrich (1991, 1998) created a typology of leader mistreatment-abuse that organizes behavior along a continuum from abrasive (i.e., less harmful behaviors, such as silence, glaring, abruptness, ignoring/snubbing, and discrediting) to abusive, more harmful behaviors (i.e., aggressive control, threats, shouting, angry outbursts, and threats of physical harm). These authors rightly stress that in actuality the severity or intensity of harm experienced by a target will vary with regard to factors such as frequency, place of occurrence (e.g., the school intercom or faculty meeting vs. the principal's office), and timing (e.g., a new teacher's first week of work).

Theories of Leader Mistreatment-Abuse

Although the relationship between organizational leadership and workplace mistreatment-abuse has been widely recognized in the theoretical and empirical literature (e.g., Bassman & London, 1993; Einarsen et al., 2003; Emler & Cook, 2001; Irish

Taskforce on the Prevention of Workplace Bullying, 2001; Keashly, 1998; Leymann, 1990; Northwestern National Life Insurance Company, NNLI, 1993; Queensland Government Workplace Bullying Taskforce, 2002; Randall, 1997; Rayner, Hoel, & Cooper, 2002), there are only a few prominent theories of leader abuse of subordinates.

Two theoretical approaches emphasize how subordinates come to feel mistreated by organizational leaders. Using exchange theory and referent cognitive theory (RCT), Folger (1993) argued that employment consists of both economic and social exchanges (i.e., exchanges of material goods, such as benefits and wages, and relational goods, such as respectful treatment). Folger contended that superordinates have a moral obligation to interact with subordinates in a dignified manner in accordance with social and professional norms. Such exchanges tend to produce feelings of self-worth, self-respect, and dignity at work. Obversely, superordinate actions that violate social and professional normative standards regarding dignified treatment can be expected to produce hostile reactions (e.g., moral outrage) and feelings of mistreatment in subordinates.

Similarly, Hornstein et al.'s (1995) theory of supervisory disrespect, based on symbolic interaction theory, organizational justice theory, and stress theory, centers on subordinates' feelings of security, self-worth, and treatment by organizational leaders. These scholars have argued convincingly that feelings of security and self-worth are central to one's psychological-emotional well-being. Hornstein et al. have found that disrespectful behavior by leaders toward subordinates has serious adverse effects on one's sense of dignity and self-esteem; such conduct also generates a myriad of stress-related illnesses, such as anxiety and depression.

More broadly, Ashforth's (1994) model of *petty tyranny* describes antecedent conditions as well as effects of mistreatment-abuse by superordinates. Ashforth contended that coercive and arbitrary supervision is based on certain predispositions about the organization (i.e., a bureaucratic mindset) and beliefs about subordinates (i.e., a Theory X orientation: workers tend to dislike work, lack initiative, resist change, and require direction, McGregor, 1960). Such antecedents have the potential to generate petty tyranny, a form of predatory leadership associated with arbitrariness and self-aggrandizement, lack of sensitivity, disparaging conduct toward subordinates, and noncontingent use of punitive measures. High stress and resistance, high alienation and helplessness, poor work performance, and low work-unit cohesiveness tend to result from this approach to leadership. Such adverse effects, in turn, tend to reinforce a superordinate's negative predispositions about the organization and subordinates. For instance, subordinate helplessness may intensify a superordinate's stereotypic orientation toward subordinates.

Comprehensive Theories of Workplace Mistreatment-Abuse

Phase models of abuse are particularly powerful in explaining the workplace mistreatment-abuse phenomenon and appear to have direct applicability to educational organizations. Leymann's (1990) seminal model was the first to depict mobbing as an evolving process within the organizational setting. To wit, in Phase I, a triggering event initiates a conflict, and in Phase 2, the target is stigmatized (i.e., the target's

reputation is manipulated via, for example, rumors, slandering, and ridicule) and the target is repeatedly harassed over a long period of time. During Phase 3, management intervenes, designates the ongoing conflict as an official matter, and, in light of the target's victimization, takes on the biased attitudes of the perpetrator (i.e., management unjustly assumes that the cause of the conflict is the target; the target becomes a "marked individual"). In Phase 4, the target is expelled from the organization. This often produces social isolation, depletion of coping resources, and feelings of desperation and helplessness.

Other examples of phase models are Björkvist's (1992) three-phase escalation model of mistreatment-abuse and Zapf and Gross's (2001) discussion of Glasl's (1994) three-phase model of conflict, including rationality and control, severing the relationship, and aggression and destruction. It should be noted that although phase models of mistreatment include some contextual factors (e.g., leadership, the structure of work), such inclusions are limited.

By comparison, the best causal models conceptualize workplace mistreatment-abuse as a complex phenomenon consisting of multiple social, organizational, and personal (i.e., related to the target, perpetrator) factors. A theoretical model developed by Neuman and Baron (1998) is illustrative. These scholars contended that antecedents of mistreatment-abuse, i.e., situational factors (e.g., organizational culture, reorganization, downsizing, physical environment) and social factors (i.e., unfair treatment, frustrating events, diversity) affect personal variables (e.g., biases, prejudices), internal states (e.g., feelings of anxiety, aggression), and cognitive appraisals (Was I treated unfairly? Was this conduct intentional?). Such processes can produce an aggressive or nonaggressive response.

However, Zapf's (1999) model of mobbing posits even greater complexity and multidirectionality and thus appears to more accurately capture the array of interacting causes and consequences relevant to understanding the workplace mistreatment-abuse phenomenon. Zapf posited social factors (e.g., hostility, envy) and organizational factors (e.g., climate/culture, leadership) impact perpetrators' use of mobbing behaviors (e.g., verbal abuse, expulsion/isolation, vilification). These types of behavior influence a victim's responses; such responses, in turn, influence the perpetrator's actions. In essence, Zapf maintained that the causes and consequences of mistreatment-abuse in a given context consist of multiple, interactive processes. The causes of mistreatment influence organization, perpetrator, social, and victim variables. Clearly, respected, leading-edge theories reject simplistic, one-sided explanations of workplace mistreatment-abuse (Keashly, 1998; Rayner, Hoel, & Cooper, 2002; Zapf, 1999).

Abusive Behaviors and Effects

Empirical studies of workplace mistreatment-abuse have focused on determining the types of verbal, nonverbal, and physical behaviors (excluding physical violence) that harm victims. Figure 1 describes a range of examples of such behavior.

Verbal Behaviours scapegoating threats put downs false accusations swearing name calling unfounded criticism (publis and private) gossiping deceit dishonesty favoritism unfair evaluations taking credit for another's accomplishments unwarranted reprimands unfair reassignments or terminations racial and sexual harassment Nonverbal Behaviours ignoring snubbing aggressive eye contact (e.g., "the silent treatment." staring) physical gestures (e.g., finger pointing, foot stomping) Physical Behaviour withholding essential resources destruction of property

theft of property

Fig. 1 Examples of verbal, nonverbal, and physical behaviors comprising mistreatmentabuse (Baron & Neuman, 1996; Blase & Blase, 2002, 2003a; Blase et al., 2006; Bjorkvist, Osterman, & Hjelt-Bäck, 1994; 2003b; Glomb, 2002; Harlos & Pinder, 2000; Hoel & Cooper, 2000; Irish Taskforce on the Prevention of Workplace Bullying, 2001; Keashly & Jagatic, 2000; Leyman, 1990; Namie, 2000; Price-Spratlen, 1995; Queensland Government Workplace Bullying Taskforce, 2002; Salin, 2001; The Workplace Bullying and Trauma Institute, WBTI, 2003; Westhues, 1998, 2004)

Studies of workplace mistreatment-abuse have also emphasized harmful effects on a victim's psychological-emotional and physical-physiological work performance and relationships with colleagues as well as personal and family-life well-being. Examples of effects are identified in Fig. 2.

Studies of Principal Mistreatment-Abuse of Teachers

Although research on workplace mistreatment-abuse has recently proliferated internationally, only two studies focusing on school principal mistreatment of teachers have been published. Blase and Blase (2002, 2003a, 2003b) investigated the long-term, severely abusive experiences of 50 exemplary public school teachers using grounded Effects on Psychological-Emotioinal Well-Being feelings of desperation incompetence shame self-doubt lonelinessobsessive thinking distrust anxietv disorientation shock panic attacks depression posttraumatic stress disorder(PTSD) Effects on Physical-Physiological Well-Being hair loss back and neck pain headaches and migraines significant weight changes (loss or gain) ulcers chronic fatigue syndrome high blood pressure irritable bowel syndrome heart attacks Effects on Work Performance and Relationships with Colleagues work impairment (e.g., desreases in initiative, creativity, risk taking, and commitment) tardiness absenteesim work mistakes impaired group decission making withdrawal from extrarole and social involvements Effects on Personal and Family Life increases in family conflict deterioration of relationships with spouses, children, and friends

Fig. 2 Examples of psychological-emotional and physical-physiological work performance and relationships with colleagues, plus personal and family-life effects from mistreatment-abuse (Australian Council of Trade Unions, ACTU, 2000; Blase & Blase, 2002, 2003a, 2003b; Blase et al., 2006; Björkvist et al., 1994; Einarsen, Raknes, Metthiesen, & Hellesoy, 1994; Glomb, 2002; Hoel, Cooper, & Faragher, 2001; Hornstein, 1996; Irish Taskforce on the Prevention of Work-place Bullying, 2001; Keashly, 2001; Leymann & Gustafsson, 1996; Northwestern National Life Insurance Company, NNLI, 1993; Pearson, Andersson, & Porath, 2000; Price-Spratlen, 1995; Queensland Government Workplace Bullying Taskforce, 2002; Tepper, 2000; The Workplace Bullying and Trauma Institute, WBTI, 2003, Westhues, 1998, 2004)

methods (e.g., Bogdan & Biklen, 1982; Glaser, 1978, 1992, 1998; Glaser & Strauss, 1967; Taylor & Bogdan, 1998). Specifically, they conducted a series of unstructured and semistructured interviews with each research participant. They produced a data-based model of principal mistreatment, which describes three levels of increasingly abusive
behaviors consisting of a total of 21 categories of abusive behavior. They also reported the deleterious effects of principal mistreatment on teachers' psychological-emotional and physical-physiological well-being and effects on relationships with colleagues, students, and teachers. Harmful effects on teachers' personal lives, including relationships with family members, were also reported.

In a second study, Blase et al. (2006, 2008) administered the Principal Mistreatment-abuse Inventory (PM/AI), a comprehensive instrument constructed from exhaustive reviews of the empirical and theoretical workplace mistreatment-abuse literature, to 172 teachers from throughout the United States and Canada. Generally, the results of this study confirmed the results of their earlier study and, in particular, quantified aspects of abusive principal behavior and its far-reaching and damaging effects on teachers. Over 40% of the teachers who participated in this study had been a victim of principal mistreatment that lasted from 1 to 3 years; for over 25%, the mistreatment lasted for over 3 years.

Blase et al. found that behaviors such as failing to recognize or praise teachers for work-related accomplishments, intimidation, favoritism, and unwillingness to provide support in difficult interactions with parents and students were the most frequently-occurring and the most intensely-harmful principal behaviors. Other high-frequency and intensely harmful behaviors were unjust criticism, overloading with work, lying, nitpicking and micromanaging, gossiping to parents/students/other teachers, unwarranted reprimands, and isolating teachers from colleagues. Blase et al. also reported that over 70% of the teachers they studied indicated that their principals had abused them frequently over long time periods. In rank order, the ten most frequently reported harmful effects were as follows: stress, resentment, anger, insecurity, sense of injustice/moral outrage, self-doubt, anxiety, sense of powerlessness, silence, and bitterness. Over 50% of teachers also disclosed effects such as fear, decreases in self-confidence and self-esteem, depression, and damaged relationships with colleagues. Overall, female teachers experienced principal mistreatment-abuse more frequently and more intensely than male teachers.

Note that over 77% of teachers who participated in this study disclosed that principal mistreatment-abuse substantially undermined teaching, that is, it reduced motivation to teacher, reduced caring/patience/tolerance of students, reduced innovation/creativity/ risk taking; and increased the use of dated, rigid, authoritarian, and ineffective teaching methods. Over 50% of the teachers studied indicated that they sought medical or psychological services, or both, to treat illnesses that resulted from their mistreatment-abuse. Blase et al. (2006, in press) also reported that 50% of their research participants wanted to leave teaching altogether because of principal mistreatment and over half of the participants considered principal mistreatment-abuse a major source of life harm.

In addition, Blase et al. (2006, 2008) found that teachers tended to use passive coping strategies (e.g., avoiding the principal, talking with others for support, enduring the principal's mistreatment) rather than assertive coping strategies (e.g., asserting oneself with the principal, speaking to higher-ups). These researchers identified a range of factors that contributed to mistreatment-abuse, including politics (61%), age (34.9%), and gender (24.4%). Other factors were the teacher's race, religion, union or association affiliation, health, illness, disability, ethnicity, and sexual orientation.

Methodological Critique

Throughout the 1990s, research focusing on workplace mistreatment-abuse emphasized attempts to conceptualize the construct and its various dimensions. Multi-item behavioral scales were used to identify types of abusive behavior and related frequencies as well as their effects, including severity of harm; psychological and physical-physiological effects; effects on work productivity and personal life; and coping responses. Studies with reliability and validity data include Sheehan, Sheehan, White, Leibowitz, and Baldwin (1990), Björkvist et al. (1994), Keashly et al. (1994), and Baron and Neuman (1996). Very few studies attempted to describe a victim's response to mistreatment-abuse and variables that affect those responses; Kahn and Byosiere's (1992) study of victims' perceptions of organizational and personal factors that affect such responses is one example of this type of work.

More recently, organizational scholars have investigated the frequency and intensity of mistreatment-abuse (Blase et al., 2006); the nature of related harm (e.g., Blase & Blase's, 2003b) phenomenological study of abused teachers; Tepper's (2000) factor and regression analyses of the effects of mistreatment-abuse and implications for organizational justice theory; and contributors/antecedents of abusive behavior (e.g., management style, hierarchy, organizational culture; see, for example, Glomb's, 2002, qualitative study of the contributors to mistreatment-abuse; Zapf's, 1999, psychometric properties of scales focusing on multicausality vis-à-vis the perpetrator, victim, organization, and social system; and Zapf & Gross's, 2001, interview- and questionnaire-based study focused on escalation of and coping with mistreatment-abuse; all are excellent examples that attempt to understand the antecedent conditions of mistreatment-abuse).

In sum, after almost two decades of research, there has been limited but expanding use of multiple approaches to define, operationalize, and study the problem of workplace mistreatment-abuse. As well, there has been overuse of non-valid measures of effects and responses to workplace mistreatment-abuse and self-selected samples.

Further Research on School Administrator Mistreatment-Abuse of Teachers

On the whole, findings from studies of workplace mistreatment-abuse in general are consistent with findings about school administrative mistreatment-abuse of public school teachers. Like their counterparts in other occupations, victimized teachers confront the same types of abusive conduct and suffer the same range of devastating professional-life and personal-life effects. However, much more research will be required on school administrator mistreatment-abuse of teachers to understand and redress this complex and disturbing problem. Quantitative studies using random samples of teachers would be necessary to determining the frequency and pervasiveness of the problem nationally and internationally.

Moreover, research based on systems perspectives – including individual, dyadic, group, and organizational factors that may directly and indirectly contribute to the development and escalation of the problem in particular contexts – will be extremely

valuable. Case studies employing multiple research methods that investigate how factors at different levels of organization interact over time to produce abuse of teachers by school leaders in a given setting are highly recommended; such studies could investigate the efficacy of teachers' coping responses, how victims confront abuse, and effects on bystanders (e.g., colleagues, students, parents).

Studies of how teachers' actions and nonactions may inadvertently contribute to their own abuse would make an important contribution to the scholarly knowledge-base. Several prominent scholars whose work emphasizes leader-follower dynamics have contended that characteristics of followers (e.g., inclination to sycophancy, risk aversion, power needs, dependency needs) can interact with abusive forms of leadership and, at the extremes, create a *folie à deux* ("shared madness"), a self-sustaining, pathological, delusional relationship with the potential to damage an entire organization (Kelley, 1992; Kets de Vries, 1989). It should be mentioned that school districts will be reluctant to permit researchers to study this very sensitive problem; consequently, researchers may be required to access samples from outside sources (e.g., professional associations, unions).

Implications for Teacher Educators

Historically, teacher educators (and administrator educators) have ignored the study of the dark side of school life (Blase & Blase, 2002, 2003a, 2003b; Hodgkinson, 1991; Starratt, 1991). Although it is widely recognized that teacher educators must deal with an incredibly overloaded curriculum, there is little doubt that they can play an important role in addressing the leader mistreatment-abuse problem. Teacher educators could, for example,

- Help prospective and practicing teachers identify abusive behavior and understand its potentially harmful effects on teachers; teacher work performance; relationships with students, colleagues, and parents; and teachers' personal lives.
- Help prospective and practicing teachers develop the basic knowledge and skills to protect themselves should they become a target of such abuse. This should include techniques to ameliorate the adverse psychological-emotional and behavioral effects of abuse, reflect on their own behavior, and develop individual and group strategies to reconstruct interaction with an abuser.
- Help prospective and practicing teachers develop skills to support colleagues targeted by abusive administrators, particularly new or inexperienced teachers. This should include viable approaches to confronting an abuser.
- Advocate for university preparation and professional staff development that promotes in learners a critically reflective understanding of both effective-constructive school leadership and ineffective-destructive school leadership.
- Work to promote awareness of the mistreatment-abuse problem through professional associations for teacher educators and practicing teachers.
- Advocate for the adoption of laws and organizational policies that prohibit abusive conduct and provide viable avenues for redress.

Conclusion

This chapter has discussed a range of major conceptual and theoretical approaches as well as empirical findings related to the general study of workplace mistreatment/ abuse and specifically with regard to administration mistreatment of public school teachers. Although a great deal of significant scholarly work has been completed on the general problem of workplace mistreatment/abuse throughout the world, it was noted that to date only two studies of administrator mistreatment of teachers have been published. To be sure, these studies provide important first steps toward describing and explaining the mistreatment/abuse problem in public education; however, much more work will be required to develop a fuller understanding of the problem. Such understandings will be necessary for the adoption and implementation of well-designed organizational policies that prohibit mistreatment/abuse and provide viable avenues for redress of such problems. Moreover, a fuller understanding of this problem will advance the development of university-based teacher preparatory programs that provide students with the requisite awareness, knowledge, and skills to confront the problem at the individual, organizational, and societal levels.

It was mentioned previously in this chapter that the teacher stress and micropolitical literature have produced early evidence of school administrator mistreatment/ abuse of teachers. The two published studies of school principal mistreatment of teachers demonstrate that such treatment results in extremely damaging effects on teachers, teaching, and student learning (Blase & Blase, 2003a; Blase, Blase, & Du, 2008). Studies of job satisfaction and motivation show that lack of respect and recognition by school administrators and society explains, in part, why American teachers leave the profession altogether (Brown, 1996; Graham, 1999; Guglielmi, 2001; Peri & Baker, 1997; Tye & O'Brien, 2002). Relatedly, Owens and Valesky (2007) have concluded that one of the greatest emotional needs of American teachers is "to achieve feelings of professional self-worth, competence, and respect; to be seen increasingly as people of achievement,...growing persons with opportunities ahead to develop even greater competence and a sense of accomplishment" (p. 388). Indeed, for those throughout the world concerned with school improvement, administrator mistreatment of teachers should be challenged head-on, because the quality of classroom teaching is inextricably and powerfully linked to student learning (e.g., Marzano, 2003).

Biographical Note

Joseph Blase is a professor of educational administration at the University of Georgia. Since receiving his PhD in 1980 from Syracuse University, his research has focused on school reform, transformational leadership, the micropolitics of education, principal-teacher relationships, and the work lives of teachers. His work concentrating on school-level micropolitics received the 1988 Davis Memorial Award given by the University Council for Educational Administration, and his coauthored article published in the *Journal of Educational Administration* won the W. G. Walker 2000 Award for Excellence.

In 1999 he was recognized as an elite scholar, one of the 50 Most Productive and Influential Scholars of Educational Administration in the world.

Blase edited *The Politics of Life in Schools: Power, Conflict, and Cooperation* (winner of the 1994 Critic's Choice Award sponsored by the American Education Studies Association, Sage, 1991); coauthored, with Peggy Kirby, *Bringing Out the Best in Teachers* (1994, 2000); coauthored with Gary Anderson, *The Micropolitics of Educational Leadership* (Teachers College Press, 1995); and coauthored with Jo Blase, *Empowering Teachers* (1994, 2000), *Handbook of Instructional Leadership* (1998, 2004), *Breaking the Silence* (2003), and *Teachers Bringing Out the Best in Teachers* (2006). Professor Blase has published over 120 academic articles, chapters, and books.

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Section 5

TEACHER LIFE-CYCLES

TRACKING TEACHERS

Sean Kelly

Diversity in Teaching Assignments

In the 1960s and 1970s it was common for secondary schools in the United States and elsewhere to differentiate college-bound students from the rest of the student body in all subjects inclusively. This practice, known as "streaming" in Great Britain, and "Tracking" in the United States resulted in the near total segregation of high- and low-track students within schools. While this extreme form of tracking became less common in the 1980s and beyond, the more general practice of having a highly differentiated curriculum and of sorting students into high- and low-track classrooms in individual subjects remains a highly salient aspect of secondary schooling.

Within schools the teaching workforce is sorted as well. The matching of teachers with the hierarchically structured courses for students is known simply as "teacher tracking." The practice of teacher tracking was documented in vivid detail in Merrilee Finley's (1984) ethnography of "Suburban" High School. Finley was struck by the fact that at Suburban some teachers had a monopoly on teaching the "good" classes where the highest performing students learned academic material, while other teachers were relegated to teaching primarily remedial coursework.

That teachers find teaching a low-track class undesirable is not surprising. Research shows that being in a low-track classroom negatively affects students' overall alignment to school, whether they enjoy school and see academics as a valuable pursuit. Not surprisingly, tracking also affects students' day to day behavior, with low track students being inattentive, withdrawn, or even disruptive (Gamoran & Berends, 1987; Page, 1991). Certainly, as individuals, low-track students often respond negatively to the relative lack of opportunity available to them. Having been labeled as low-achievers with few prospects for success in school, it makes sense for students to reject schooling as a worthwhile pursuit and seek a positive sense of self-worth outside the achievement-ideology of the school. Over-time, group dynamics develop which further erode low-track students commitment to school and academic achievement; it becomes "cool" to cut-up and avoid school work. Low-track teachers are put in the difficult position of trying to foster student engagement and promote achievement growth with little leverage to motivate or discipline students who have already been labeled as low-performing. The comments of one of the teachers at Suburban

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching*, 451–461. © Springer Science+Business Media LLC 2009 assigned to teach the "failures of the failures" reveals the compromises low-track teachers must make:

I say to them, "If you're not good in English the world isn't going to come to an end; you have to do this to graduate, then you can go back to what you like to do or get on with it …" In these classes, we'll do what's appropriate to their mood that day. We may read aloud, play charades, or do role playing. I get them involved first, get them on my side … I don't push too hard. (Finley, 1984, p. 236)

The Prevalence of Teacher Tracking

Within a school teacher tracking is not a necessary function of student tracking. Because teachers often teach six or more classes a day, it would be possible for all teachers to teach a variety of classes, encountering high-, low-, and regular-track students throughout the day. And yet, analyses of large educational databases suggest that teacher tracking is a widespread practice (Kelly, 2004; Raudenbush, Rowan, & Cheong, 1992; Riehl & Sipple, 1996; Talbert, 1992). In the 1990–1991 School's and Staffing Survey, a nationally representative database from the United States, Kelly (2004) found evidence that over 90% of secondary schools engage in some amount of teacher tracking. What does this mean at the level of individual teachers? Using the Administrator and teacher Survey (ATS) from the High School and Beyond database, a survey well suited to within-school analyses, Talbert (1992) found that about 34% of teachers were assigned to teach either predominantly high- or low-track classrooms. Thus, many teachers do teach students with a variety of different ability levels throughout the course of the day. Perhaps for example, two regular track and one college-prep English classrooms in the morning, and one regular and two college-prep classrooms in the afternoon. Teacher tracking is a widespread practice, but it is especially salient to the $\sim 1/3$ of teachers who spend almost all of their day working with either high- or low-track students.

The Effect of Teacher Tracking on Student Outcomes

In order to understand the effect of teacher tracking on the educational experience of students, it is necessary to consider how teachers are mapped onto tracked learning environments more carefully. If teachers were assigned predominantly high- or low-track classrooms on a random basis, teacher tracking might have little effect on the quality of instruction in high- and low-track classrooms. Research suggests that rather than being random, the process of teacher tracking is linked to important determinants of instruction. The differences in the teaching assignments that Finley (1984) observed at Suburban were certainly no accident; they represented a status hierarchy with a known set of criteria determining which courses a teacher was assigned to teach. In the competitive suburban school Finley studied, a teacher's daily course schedule was principally a function of three factors, seniority, academic credentials, and motivation.

The unofficial policy at Suburban was to assign courses for the upcoming year to the teacher who was currently teaching them. Seniority then, played a large role in the teacher tracking process, with new teachers being assigned the least desirable classes. A similar emphasis on seniority has been noted in other ethnographies of tracked schools. For example, Sisken (1994) described how the policy of assigning upper-track courses based on experience produced angst among newer teachers who saw themselves as highly qualified to teach the upper-track courses. According to the Science chair:

Brad Carter, who's a brand new teacher, wants to teach AP biology. Well, that's great, Brad. Wait in line like everybody else. I mean, there are other teachers in the department that would like to teach AP biology but there's only two sections. If you're a first-year teacher I'm afraid you'll have to kind of wait your turn, even though you may feel that you're the top person to teach that. (Siskin, 1994, p. 140)

Teachers with advanced degrees, or degrees from prestigious universities may see themselves as Brad Carter does and be drawn to teach upper track classes. These well trained teachers might be drawn to the elite students themselves, or have a strong attachment to their subject matter and a desire to teach elite courses where they can continue to engage the material analytically (Lortie, 1975). Principals, department heads, and other administrators may also see teachers with advanced degrees as more capable of instruction in the upper tracks, or as better role-models for elite students. With seniority, a teacher with an advanced degree from a top university is a likely candidate to teach high- track classes.

Apart from the more objective criteria of seniority and credentials, at Suburban, some teachers were simply more motivated than others to teach high-track classes. One highly motivated teacher was even able to create a new course with a prestigious subject matter tailored to high-track students, and recruit them into his class. The potential importance of motivation in determining teaching assignments stems from the nature of the teaching profession. Many of the rewards of the teaching profession are psychic in nature (Lortie, 1975). Teachers achieve a sense of accomplishment and validation of their performance as teachers when students are engaged and learning is occurring, when they can "reach a student." Tracking creates a favorable climate for fostering engagement and motivating high-track students to work hard in the classroom. It makes sense that the teachers who are motivated to accomplish their goals in the classroom may gravitate toward the learning environments where these goals can be realized on a more frequent basis. The highly motivated teacher may even attempt to create a new course, as was the case at Suburban.

Using the 1990–1991 Schools and Staffing Survey data, Kelly (2004) largely confirmed Finley's model of teacher tracking. Teachers with more seniority in a school (and also more teaching experience on average) were more likely to teach high-track courses. High-track courses were also more likely to be taught by teachers with master's degrees, and with a greater amount of training in the subject matter they teach. Kelly (2004) also found some indication that higher-track teachers may be more motivated in general, because they had a greater likelihood of being enrolled in professional teaching organizations and lower earnings from jobs outside of teaching. Surprisingly though, lower-track teachers had actually completed more coursework in teaching methods than high-track teachers.

That upper-track students are instructed by the most highly motivated teachers, and the teachers with the highest educational attainments and most experience, and lower-track students by teachers with less of these qualities, suggests that the process of teacher tracking is likely to have an important impact on educational inequality. Teacher tracking exacerbates the inequalities in opportunity to learn produced by tracking by matching the teachers who are most likely to be successful in the classroom with the students who already occupy a privileged position in the educational system. The pedagogical training of many low-track teachers is an exception to this general conclusion.

Possibly correlated with differences in teacher quality, research on tracked learning environments has found that both the content (Gamoran, Nystrand, Berends, & LePore, 1995; Oakes, 1985; Rosenbaum, 1976) and the style of instruction differ across tracks (Gamoran & Kelly, 2003; Metz, 1978; Schwartz, 1981). Low-track classrooms are simply less rich instructional environments. For example, in their comparison of high and low track literature instruction in English classrooms, Gamoran et al. (1995) found that many of the discussions in low-track classrooms were off-topic, and contained little or no analysis of the text. It is difficult to determine to what extent these instructional differences are caused by teachers themselves, since instruction always involves give and take by students and teachers. On the other hand, the knowledge, experience, and motivation of teachers are certainly important determinants of the quality of classroom instruction. It is not surprising that researchers find large differences in achievement growth between high- and low-track classrooms, even after accounting for differences in the types of students typically found in differently tracked classrooms.

The Work Lives of Tracked Teachers

The conclusion that teacher tracking exacerbates the instructional differences across tracked classrooms is supported by research on how teaching low-track classes affects the professional work of teachers, in particular, a teacher's sense of efficacy. Research on the work lives of teachers also reinforces the conception of teacher tracking as a "status hierarchy" by showing that organizational resources provide greater support to high-track teachers than low-track teachers.

Teacher Efficacy

For teachers assigned to low-track classrooms, like the English teacher previously quoted, achieving a sense of efficacy in the classroom can be difficult. Teacher efficacy is a crucial component of effective teaching, and a teacher's satisfaction in the workplace. Instruction for both teachers and students is an iterative process, with previous experiences shaping approaches to learning and teaching in the classroom. Teachers with a low sense of efficacy, who don't feel that they can foster student engagement and achievement growth in their classrooms, may feel helpless, and their level of effort at the head of the class may lag. The obverse is also true, successful experiences in the classroom foster future commitment and effort. The relationships between teaching in a low-track classroom, efficacy, and overall teacher satisfaction are well

documented. Low-track teachers have lower levels of efficacy and are less satisfied with their careers (Lee, Dedrick, & Smith, 1991; Raudenbush, Rowan, & Cheong, 1992; Riehl & Sipple, 1996; Talbert, 1992). In a sophisticated quantitative analysis Raudenbush et al. (1992) used multi-level models to explore differences in efficacy and satisfaction across the course of a teacher's day as they moved from class to class, and between different teachers on average. Raudenbush and colleagues (1992) found that within a teacher's daily schedule, the difference between an academic and non-academic course lead to almost a full standard deviation change in teacher satisfaction. Moreover, among different teachers, the most important predictor of a teacher's sense of efficacy was the average track level of courses that teacher taught.

Organizational Support

Low-track classrooms are inherently challenging environments in which to teach, because the students are clearly labeled as low-status students. Are schools and districts committed to supporting instruction in low-track classrooms? Unfortunately for low-track teachers, the difficulties that teachers experience in their classroom interactions with low-track students are not ameliorated by a high level of organizational support for their teaching. Despite the fact that low-track teachers are typically the least experienced teachers in a school, low-track teachers actually have fewer organizational resources such as administrative support, help with instruction, influence on school policy, and autonomy (Lee et al., 1991; Raudenbush et al., 1992; Riehl & Sipple, 1996; Talbert, 1992). The uniformly low level of organizational support for low track teaching is almost paradoxical. On the one hand, schools and districts give low-track teachers the least autonomy; they are the most directive about what should be taught in low-track classrooms. Yet, schools are simultaneously the least supportive of those teachers (or at least that is how they are perceived). In their analysis of variation in organizational support across schools. Lee et al. (1991) surmised that while on average low-track teachers receive less organizational support, perhaps some schools may have moved to mitigate the difficulties of being a low-track teacher with greater instructional support and treatment as autonomous professionals. Instead they found the opposite; low-track teachers uniformly had access to fewer organizational resources than high-track teachers. The research on differences in organizational support for teaching among high -and low- track teachers reinforces Finley's conception of teacher tracking as a status hierarchy. A good teaching assignment and organizational support are both valued rewards, likely to be allocated in tandem to the teachers with the most experience, credentials, and motivation.

Differences in the Quality of the Teaching Workforce Across Schools

The practice of teacher tracking has been conceptualized primarily as a within-school status hierarchy, mapped onto the system of curriculum differentiation for students. However, just as students are segregated across schools, teachers are also unequally distributed between schools. Studies of variation in teacher quality across schools reinforce the findings from research on teacher tracking; teachers are highly sensitive

to teaching context. Teachers seek out contexts in which they feel supported by both the school and community, and in which they believe they can be successful. Using the state of New York as an example, Lankford, Loeb, and Wyckoff (2002) present an alarming portrait of the differences in teacher quality that can exist between schools. In 10% of New York City schools over half of the teaching force has failed the New York State liberal arts exam for teachers. Moreover, the schools with the lowest quality teachers, those who fail exams, have the least experience, lack teaching certificates, and graduate from the least competitive universities are those that poor and non-white students attend. These differences are caused in large part by teacher attrition from disadvantaged schools. When highly qualified teachers leave schools, they frequently leave schools with poor minority populations for schools with different student populations and higher pay. An important factor in teachers' decisions appears to be the behavioral climates of schools (Guarino, Santibanez, & Daley, 2006). Like student tracking within an individual school, the inequalities in resources between different schools, many of which are organizational in nature, create an unequal distribution of teachers.

In his seminal book on the teaching profession, School Teacher, Lortie (1975) identified an important structural deficiency of the teaching profession, the lack of a career ladder. Unlike many other professions, the day-to-day work of a teacher, classroom instruction, changes little as they gain experience and seniority. Moreover, the pay-scale for teachers is relatively flat and "front-loaded" with relatively high starting salaries followed by very modest raises over the course of the career. In 1998–1999, the minimum beginning salary of a new teacher in the United States was 66% of the average salary, which includes many veteran teachers (National Center for Education Statistics, NCES, 2000, Table 77). Lortie (1975) argued that the unstaged nature of the teaching career might ultimately negatively affect innovation and effort among teachers. Teacher tracking within schools, and its between-school parallel, create an exception to the unstaged nature of teaching. As teachers acquire desirable high-track teaching assignments within schools, or positions at elite schools, they experience some degree of upward mobility. While this may have some positive affect on the motivation of teachers who are successful at climbing the informal career ladder, a heavy price is exacted on the children who are left behind. There are other policy initiatives that can be implemented in order to motivate and reward dedicated teachers, such as "master teacher" programs.

Reconsidering the Effect of Teacher Tracking on Student Outcomes

Research on the effects of teacher tracking on the educational outcomes of students, and on the professional lives of teachers, finds that the matching of teachers to students is an important element of the stratification order of schools. With respect to teachers' sense of efficacy and satisfaction, the effects of teacher tracking are profound. Quantifying the effects of teacher tracking on student outcomes in the same way is somewhat more difficult, in part because it is so prevalent. In this section I discuss three areas of research which may provide additional insight into the possible effects of teacher tracking on student outcomes. Research on the magnitude of teacher effects on learning illustrates the large possible effects of teacher tracking. Research on the effects of teacher-student matching suggests a more complex view of teacher tracking. Instruction in low-track classrooms is difficult even for experienced teachers, and requires understanding and identification with students' needs. Finally, studies of international variation in tracking systems suggests that the effects of teaching tracking depend on the context of the tracking system itself, *how* students are tracked to begin with.

Understanding the Magnitude of Teacher Effects on Achievement

One of the contributions of research on school effects – how much differences among schools contribute to inequality in educational achievement – has been to show that in general schools reduce inequality, not increase it (Downey et al. 2004; Entwisle, Alexander, & Olson, 1997). This robust finding helps temper the burgeoning accountability movement which seeks to label schools as "low performing," or even as "failing" because it shows that in fact even high poverty schools with relatively low resources do indeed add significant value to students' achievement levels. Within the larger research agenda on school effects, researchers have sought to identify the effects of teachers as well. Just as research can provide estimates of the relevance of differences among schools, we wonder how much difference teachers really make. Does a "bad" teacher really slow student achievement growth? Can having several "good" teachers in a row turn an average student into an excellent one?

Since the earliest studies of school effects, teacher quality has always been one of the strongest variables associated with a school's impact on achievement (Coleman, 1990). Recent experimental evidence from the Tennessee STAR experiment, where elementary school students were randomly assigned to teachers, confirms that teachers have large effects on student achievement (Nye, Konstantopoulos, & Hedges, 2004). Nye et al. (2004) estimate that the difference between having an "effective" teacher, where achievement growth is at the 75th percentile, and "a not so effective" teacher at the 25th percentile is between 1/3 and 1/2 a standard deviation in achievement growth. Contrary to the picture of school effects as relatively similar across schools, data from the STAR experiment and other studies supports Daniel Fallon's assertion that, "The most important variable in improving student learning is the quality of the teacher" (Fallon, 2000).

In the context of research on teacher effects, the practice of teacher tracking seems highly likely to increase inequality in student achievement within schools. Upward mobility by students from the non-college track to the college-bound track is relatively limited (Lucas, 1999). Thus, year after year high-track students encounter more highly qualified teachers, teachers with more experience and a higher level of educational attainment in the subject matters they teach, perhaps higher levels of motivation, and certainly greater levels of efficacy and satisfaction than low-track teachers. If the difference in effectiveness of high- and low-track teachers was even a fraction of Nye et al.'s estimate of an "effective" and "a not so effective" teacher, the cumulative effects of teacher tracking on educational inequality over the course of secondary school would be powerful.

Teacher-Student Matching

A more refined conception of teacher tracking recognizes that the effect of teacher tracking on the educational experience of high- and low-track students is not determined solely by differences in the experience or credentials of teachers, but also by whether the teacher is a good match for his or her students. The relevance of student and teacher matching has been highlighted in recent research on the interactions of student and teachers of differing race and ethnicities. White teachers for example, as opposed to black teachers, are more likely to provide poor evaluations of black students' behavior when compared to white students (Alexander, Entwisle, & Herman, 1999; Downey & Pribesh, 2004). In a general sense, a teacher's perception of his or her students and their approach to instruction depends on the composition of the students they teach. Teacher tracking can be understood as an instance of the more general educational problem of matching a heterogeneous population of students.

Across tracked learning environments, this concern was illustrated in a study by Caughlan and Kelly (2004) of instruction in a high- and low-track English classroom taught by the same teacher, Mrs. Vernon. This research provides an interesting insight into the alternative to teacher tracking, which is for individual teachers to teach a full-range of classes with students of differing levels of achievement. Caughlan and Kelly found that many of the highly effective practices Mrs. Vernon used in her high-track classroom, such as linking literature to the students' lives, and making inter-textual connections across lessons to illustrate literary principals failed to be enacted in the low-track classroom. The resultant differences in achievement growth in her two classrooms were of the same magnitude as the average differences between high- and low-track teachers in English and Language arts (Gamoran & Kelly, 2003). The instructional shortfalls in the low-track classroom appeared to be caused not by a lack of commitment to those students, but by a significant cultural disconnect between the teacher and her low-track students, which in turn impacted daily instruction. At times, such as when Mrs. Vernon was envisioning her low-track student's future lives, the utility of what they were doing in the classroom seemed lost to her. The example of Mrs. Vernon, while only a single case, calls into question the assumption that teachers who are highly effective with one group of students will be equally effective with another group of students.

International Variation in Tracking Systems

Much of the research on teacher tracking has been in the context of the United States and Great Britain where the system of student tracking has some well-established properties. In the context of the United States in particular:

- 1. Mobility among tracks is not uncommon, but much of the mobility is downward, upward mobility is quite limited.
- Tracking systems are often highly differentiated, with five or more distinct levels or sequences of course taking in subjects like mathematics.
- 3. The effects of course taking on achievement are quite strong.

- 4. The official policies that determine a student's track placement are diverse and vary considerably from school to school.
- 5. Even after controlling for student achievement, ascriptive characteristics such as social class and race are associated with track placements, although again, this varies considerably from school to school.

International studies of tracking have shown that these properties do not always hold in other contexts. Broaded's (1997) study of Taiwan provides an example of an educational context where the track placements are not biased by social class differences, and subsequent track placements are based largely on achievement rather than on a student's current placement. Educational systems like Taiwan's may produce much weaker forms of teacher tracking than seen in the United States. At the opposite end of the spectrum are Western nations that separate students at a relatively early age into completely different schools depending on their presumed educational and occupational destinations like Germany, Switzerland, and the Netherlands (Lucas, 1999, p. 2).

Studies of elementary schools which serve disadvantaged students in the United States have found that students who enter school with weaker reading and writing skills are often treated as if they have a reduced capacity, or potential to learn. Initially low performing students are held back grades, placed in special education classes, and placed in remedial instructional groups within classrooms at a very early age, even when actual achievement data reveals marked improvement from year to year (Entwisle, Alexander, & Olson, 1997). At the high school level, the high level of differentiation in the tracking system, and the low incidence of upward mobility are consistent with a system that does not see much potential in students who arrive at high school as low-performing students. The pronounced status hierarchy that Finley described may rest on the way low-track students are situated by their institutions, and responded to socially by the adults in their lives. In an educational system where adults were slower to identify students as more or less capable of learning academic material perhaps there would be a much looser connection between the "elite" teachers and the students they teach. Unfortunately, most studies find that the "strong" version of teacher tracking Finley uncovered is widespread in the United States. This is particularly evident in the near universality of the relationship between the level of a course taught by a teacher and their efficacy and satisfaction with that course. Comparative studies are needed of teacher tracking systems, particularly in educational contexts where student tracking systems promote upward mobility and are less strongly correlated with achievement growth.

Conclusion

Teacher tracking is a widespread phenomenon that has an important impact on the quality of instruction in tracked classrooms and on the work lives of teachers. High-track classrooms are seen as the "good classes" with eager students that are rewarding to teach, especially when students are highly differentiated and rigidly tracked. There is certainly a meritocratic element to which teachers have access to high status courses

in the sense that training and experience are rewarded. Indeed, the result is somewhat of an informal career ladder. A parallel process exists between schools, with teachers migrating to elite schools with well-behaved, elite students. But whatever beneficial effects of teacher tracking exist for those teachers who gain access to high-track students, the effect on educational inequality among students is likely pernicious.

Teacher effectiveness, as measured by the achievement growth of their students, varies greatly. Thus, differences in teacher quality across tracked classrooms are cause for concern. High-track teachers are more experienced, have higher levels of subject matter training, and advanced degrees compared to low-track teachers at the same school. Certainly many low-track teachers work hard to provide exemplary instruction. Moreover, it is not at all clear that a teacher with an advanced degree is more effective than a teacher with less formal training, but a greater understanding of, and facility with, his or her particular students. Yet it seems that on average high-track teachers are situated to be more effective than their low-track counterparts. Compounding these differences is the large gap in efficacy and satisfaction teachers report when teaching high- and low-track classes. The process of teacher tracking matches the lowest performing students with teachers who spend the majority, or all of their day in low-track classrooms. Most teachers do not feel very efficacious in low-track classrooms: they have little confidence in their ability to enhance students' learning experiences. As a result, low-track students encounter low-track teachers who are the least satisfied with their careers as teachers. Moreover, the scarce organizational resources which might mitigate the inherent challenges in teaching a school's lowest performing students are more easily accessed by high-track teachers.

Biographical Note

Sean Kelly is an assistant professor of sociology at the University of Notre Dame and the Center for Research on Educational Opportunity. His research has focused on several educational issues facing America's schools, including problems of student engagement, the process of matching teachers to classrooms, the assignment of diverse students to course sequences in high school, and the causes of teacher attrition.

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TEACHERS' WORK, POWER AND AUTHORITY

Terri Seddon and Phoebe Palmieri

Introduction

Power and authority are central features of teachers' work. Many studies of teachers emphasise the impact that teachers have on students. Michael Kirby (2006), now High Court Judge in Australia, recalls his teachers,

The teachers I had were just marvellous and I owe a lot to them. Next to your parents, teachers have the greatest influence on your mind expansion. Certainly they did in my case ... I'll always be grateful to my teachers. ... I remember each one of them quite vividly. They're not forgotten in my mind. They're clattering around in my brain. They were great influences in my life. (Metcalfe & Game, 2006)

Yet teachers are also criticised for their unacceptable influence on students. For example, in mid-1985, Australian journalist Greg Sheridan published an article under the headline 'The lies they teach our children: vipers in the nation's classrooms' (Sheridan, 1985). The article opened with the statement, 'All around the country, teachers are giving our children a diet of intellectual poison' (Sheridan, 1985, p. 1). Twenty years later, Australian Prime Minister, John Howard (2006), criticised 'fashionable, progressive views that have held sway in schools and universities', stating that:

Few debates are as vital as those over education, whether it be in upholding basic standards on literacy and numeracy, promoting diversity and choice or challenging the incomprehensible sludge that can find its way into some curriculum material.

These two contrasting examples focus attention onto the forms of power associated with teaching and highlight a longstanding distinction between 'authority' and 'coercion' in political theory (e.g. Clegg, 1989). The former example acknowledges the *authority* of the teacher, the legitimate exercise of power within the teaching-learning relationship and the way it is received by those subject to it. The latter examples question the legitimacy of teachers exercising their power in teaching particular kinds of knowledge and skills. By implication, the comments suggest that teachers are *coercing* students into particular ways of understanding the world.

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching*, 463–479. © Springer Science+Business Media LLC 2009 Despite the significance of these forms of power within teaching, much research on teachers does not address issues of power and authority explicitly. Instead it focuses on teacher-student relationships and explores teaching techniques, their links with individual personality, multiple intelligences and brain sciences, and the way these techniques play out in classrooms. This research has fuelled efforts to improve teaching and learning through the reform of technique, encouraging teachers' reflections on their practice, and the implementation of new curriculum and assessment frameworks or patterns of leadership. In such research, there is no attention to the industrial and political dimensions of teaching.

Another way of understanding teachers considers the significance of power and authority in their work. This 'teachers' work' perspective has emerged through a synthesis of several disparate research traditions. It sees teachers as workers engaged in a labour process in workplaces that include classrooms, schools and school systems, and the diversified learning spaces which are increasingly acknowledged as sites of lifelong learning. Teachers' work in these workplaces involves them, consciously or unconsciously, in social and political projects that have their effects within and well beyond the walls of the classroom and the lives of each individual.

This approach to the study of teachers uses the language of work and workers to highlight features that teachers share with other workers. The fact that teachers enter an employment contract, for example, means that they experience certain kinds of relationships with colleagues, clients, associate professionals and managers; organisational imperatives and ways of working in the workplace; and patterns of conflict and negotiation in workplace and industrial relations. Power and authority are important features of these experiences.

This focus on 'work' is not commonplace in education, which tends to see teachers as professionals and teaching as a profession. Governments and some writers present teachers in terms of the classical idea of a profession. In representing teachers this way they claim a particular body of expert knowledge and practice for teachers and emphasise the way they exercise a high degree of autonomy, complexity and social responsibility (e.g. Hargreaves, 1996). Yet the application of the term to teachers is highly contested, as Mockler and Normanhurst (2004) note. Increasingly, research downplays the distinction between profession and occupation, seeing these as different occupational groups which use 'professionalism' as a practice of organising or 'discourse' that mobilises power and knowledge in particular ways to shape, defend, reproduce and transform organization and identity (Evetts, 2006; Seddon, 1997). In this respect, research in the sociology of professions has converged with the study of teachers' work, examining power and authority through its focus on knowledge.

Teachers' Work: A Generative Tradition

This 'teachers' work' tradition of research focuses on teachers' agency and explores the way power and authority embodied by teachers is both enabled and constrained by the organisation and practices of educational work. Its core concepts are drawn from the sociology of work which examines the social and historical construction of work, its roots in the division of labour, the way occupations and processes of staffing jobs have changed alongside changes in work and organisations, and the industrial and political dynamics which have accompanied these developments (Abbott, 1989; Bidwell, 2005; Cornfield & Hodson, 2002; Grint, 1998; Shain & Ozga, 2001). These concepts are applied to teachers and their work, and provide a framework for orchestrating distinct lines of empirical inquiry within education: the sociology of the school as an institution; studies of teachers as a social and economic group; social and feminist histories of teaching, studies of education in relation to states, publics and the wider world of work; and the social and political effects of language and cultural understandings in educational work.

This synthesis of conceptual and empirical inquiry directs attention to four main themes:

- Teachers as workers and teaching as an occupation;
- The teaching labour process;
- The industrial dynamics of teachers' work; and
- The culture and politics of teachers' work.

The early work on the sociology of teaching (Waller, 1961) and professionalism (Seddon, 1997) reflected debates between structural functionalism and interactionist sociology, highlighting the impact of teaching on teachers as people, and the way school-based interactions constructed meanings, work practices and coping strategies. School effectiveness research sought to enhance schools through top-down strategies, while ethnographies and school improvement research shone a light on teachers' experience and their capacities to drive and also obstruct change from the bottom up. Critics have drawn on studies of the labour process (Braverman, 1974; Thompson, 1989) to demonstrate the way teachers' work has been deskilled through Taylorist strategies, which separate the conception of tasks from their execution. The suggestion is that teachers become technicians through the sub-division of holistic work into detailed subtasks, the application of technology aimed at 'teacher-proofing' learning, and the growth of reporting and administrative work to serve accountability demands. Teachers are deprofessionalised as their discretion in tasks and time declines and their work is subordinated to managerial control. Yet there were also critics of this deprofessionalisation thesis who considered this view too narrow, and looked to situate teachers' work more broadly within wider economic and political debates, social movements and class and gender struggles, and changing parameters of time and space.

Social and labour histories (e.g. Grace, 1978; Theobald & Selleck, 1990; Ruzicka, 2002) flesh out this sense of teachers working within and against conditions that are constrained by the challenges and talk of the times, patterns of work organisation and boom-bust economics, and the regulatory powers of the state. They highlighted long term patterns of continuity and change. Changing patterns of regulation through the twentieth century constituted teachers with licensed autonomy in their work, which is being re-regulated and constrained in the twenty-first century (Lawn, 1996; Lawn & Ozga, 1981; Ozga & Lawn, 1988).The consequences of the persistent feminisation of teaching, continue to be evident in a distinctive gender division of labour that sees most women teaching and more men in senior positions with greater discretion and voice. These histories reveal the way teachers mobilised through their unions to negotiate working conditions and contest managerial prerogative

(Lawn, 1985; Somech & Carter, 2005). They also contributed to wider collective movements focused by commitments to political projects, such as national independence (Dove, 1979; Myers, 2007) and feminism (Middleton, 1987). Statistical research on teacher labour markets confirms the gendering of teachers' work, and also the way teacher education, employment and working conditions create selective recruitment patterns in terms of gender, class, ethnicity and broader demographic patterns. The post World War 2 baby boom, for instance, which supported an enormous growth in teachers and teaching, is now playing out in large-scale retirements leading to concerns about teacher shortages in the western industrialised countries and brain drain from countries with more limited opportunities than the rich west.

The early synthesis of these research traditions produced a distinctive approach for researching teachers' work (Apple, 1986; Connell, 1985; and the social and labour histories), which coincided with the proliferation of neo-Marxist sociology of education and its revision initially under the influence of feminist and race theorists, and later through Foucauldian analysis of discourses, systems of reason and governmentality. These syntheses, framed by developing debates within critical social theory (Agger, 1998; Weedon, 1987), opened up new ways of understanding teachers and their work in two respects.

Substantively, the teachers' work approach challenged the conventional view that teachers were somehow special as an occupational group. Instead, teachers were seen to be workers like any other, and their work practices and working lives were profoundly influenced by their subordination to the employment contract and the wider patterns of industrial politics. The employment relation provided an entry point for micro and macro-level studies (e.g. focusing on working lives, workplaces or wider industrial and policy questions) and set issues of power and authority, control and legitimacy, and contradiction and change at the heart of the analysis. Focusing on the employment relation also raised questions about the relationship between employment and the wider life-world (e.g. unemployment, domestic work, unpaid non-commodified work, public vs. private work). These questions, informed particularly by feminist research, challenged 'malestream' accounts that privilege paid employment at the expense of unpaid labour, and downplay the relational and spatial construction of commodified and care work (Pocock, 2006; Walby, 1986).

Conceptually, the teachers' work approach problematises the idea that teachers and their work are static, known in a categorical way prior to analysis. Rather, it emphasises the relational formation of teachers and teaching over time and space. Categories (like 'teacher', 'schooling' or 'institution') are reconceptualised as historically and spatially specific entities and identities that are always in open-ended formation as a consequence of diverse, multi-voiced, social and symbolic practices that are constituted within relations of power, (relations of domination and subordination, advantage and disadvantage, possession and dispossession) and operate at different scales (the body, local, national, global). Understanding teachers and their work as outcomes of social processes avoided the critiques of Marxist structuralism and the idea that people were simply passive bearers of social structures, because a teacher was formed and became self-forming within social and discursive practices. This relational perspective sees teachers' work in terms of 'identities-entities, the relations "between" them, and the spatiality which is part of them, are all co-constitutive' (Massey, 2005, p. 10).

Framed in this way, the study of teachers' work provides a way of understanding power and authority in relation to: the nature of teachers and teaching as an occupation; the distinctive characteristics of the teaching labour process; the contested organisation of educational work and the negotiation of autonomy and control of the teaching workforce; and the implications of this organisation of teachers' work for teachers' agency and social and political projects.

Teachers and Their Work

Teachers as Workers; Teaching as an Occupation

Seeing the teacher as a worker immediately raises questions about the teacher as an employee and about relations with other groups of workers, employers and the state. Teachers are workers with distinctive attitudes to students, to teaching and to education. The relational perspective sees these cultural understandings arising from relationships that make up the life of a group, rather than being individual attitudes and opinions. Yet these discourses of teaching and what it means to be a teacher are also shaped by symbolic practices that are anchored in social relationships within the wider society. As the quotes from Sheridan and Howard illustrate, the late twentieth and early twenty-first centuries have seen a pervasive 'discourse of derision' (Ball, 1990) mobilised in relation to teachers by conservative politicians and public opinion shapers in order to leverage changes within the organisation and practices of teachers' work.

Teachers' professional identify has emerged as a significant field of research over the last decade. Identity is not understood as something that one 'has', but as an outcome of social processes – something that develops and is shaped by the multiple experiences and influences on personal and professional life. Teachers' identity shapes their views of themselves as individuals, their roles and duties as teachers, and their attitudes towards teaching. It is also influenced by the expectations of others (schools, communities, governments etc.) including general ideas of what a teacher should do and be (Beijaard, Meijer, & Verloop, 2004).

Labour market research and historical studies of teaching as an occupation have revealed the social structuring of teachers' work. Teacher's employment is patterned by salary scales, avenues for promotion, and status hierarchies which play out within the bureaucratic organisation of schools, and increasingly across market segments of schooling. Traditional sectoral divisions between public and private, or general and vocational education, are being overlaid by market values focused on price, social position and global location. The pursuit of global-English, for example, is an important driver of global mobility amongst non-English speaking students. Teachers, like students, flow according to the perceived positional goods provided by particular teaching and learning workplaces. The trend is towards a global education market which shapes a division of labour within teaching. Teacher supply and demand are further organised by the external labour market, governed by a general availability of jobs and opportunities for transferring between occupations (Warren, 1989; Smyth, Dow, Hattam, Reid, & Shacklock, 2001).

The labour market for teachers (both within and beyond teaching) is different for men and women. Wider employment opportunities for men have contributed to the over-representation of women in teaching. This has been termed 'feminisation' but the picture is not straightforward because the concentration of women is not uniform. Historically there have been different regional gender patterns. In nineteenth century Canada and the United States, for example, urban school systems favoured men, whereas rural schools showed larger numbers of women. These patterns arose partly because in a frontier context men could find alternative work, but also because of expectations about women's work and existing traditions of domestic tuition in which women worked as teachers. Men and women are usually also distributed differentially in the internal labour market: infant schools are strongly feminised, but secondary science departments and school management are masculinised. These patterns are paralleled in universities where women are concentrated in the lower lecturer ranks and professors are disproportionately men. In vocational education the wider gender division of labour, and the historic privilege accorded to the trades and apprenticeships, compound the gender division of teaching labour. Across sectors, there are many women teachers but they are most commonly guided and directed and controlled by men (Danylewycz & Prentice, 1986; Heikkinen, 1996; Malloch, 2006).

This view of teachers as workers reveals that a teacher's career is not just a matter of personal choices that shape the course of an individual's life. It is the consequence, at an individual level, of labour market dynamics, patterns of incentives (salary structure and promotion), institutional orthodoxies, organisational structures and alternative employment opportunities. Men and women make career choices, but they are made within socially defined limits and opportunities that operate within and between different social scales. Widely held assumptions about women's' capacities, their domestic and family responsibilities, and interpretations of their different ways of working mean that women and men teachers experience quite different 'careers' (Dillabough, 1999; Gonon, Haefeli, Heikkinen, & Ludwig, 1999).

The Labour Process of Teaching

The core of teachers' daily work is a familiar practice of working with learners but it is difficult to pin down or describe in a meaningful way. Too often descriptions are mechanical or hinge on author's memories of their own schooling. Such accounts draw attention to the more or less standard techniques for classroom control, for expounding what is to be learned, and for testing. The conventional ways of looking at teachers' methods have emphasised individual variations in these techniques or personal 'teaching styles'. Classroom observation and teachers' accounts show considerable variation in the encouragement of student initiative versus class drill, or formal knowledge versus practical application. Around the business of face-to-face instruction is a battery of other tasks necessary to keep schools running, from playground 'police' duty to book-keeping and inservice training.

The relational approach to teachers' work has argued that these variations in the labour process are not idiosyncratic but are systematically produced by the social relationships surrounding the classroom and the culture and traditions of education within particular schools, sectors or nation-states. They arise in the history of interaction of a school's staff with its particular clientele, such as the emphasis on 'drill' in teaching working-class students; in the classroom strategies of science teachers; or in broad divisions within the curriculum, for example in the teaching of 'academic' as compared with 'practical' or vocational subjects.

The core of the teaching enterprise – getting students to learn – is a complicated process involving emotional relationships, intellectual interactions, group dynamics and the exercise of practical judgment in constantly changing circumstances. It is also difficult to pin down as 'work'. This is because it is a labour process without a clearly defined object (in the sense of a physical product produced in factory work), although market reforms encourage students and teachers to see their work as a kind of commodity production. As user-pays arrangements have been generalised, teachers are encouraged to define their work as producing goods and services for customers who may be the learners they teach, but may also be parents who pay for schooling or employers who recruit the products of teachers' work to jobs (Brown, 1990).

Academic studies of teachers using time and motion techniques tend to miss what teachers see as the core of their work, in particular its rich content, the process of learning and the dilemma of relationships that rest upon both care and authority (Metcalfe & Game, 2006; Steedman, 1987). Instead the nuances of teachers' work are translated into mechanical characterisations, like transmitting knowledge, or inputs and outputs, or they are reduced to abstract opposites: education that is about content or process, too academic or too focused on pastoral care.

The teacher's skill in supporting learner's learning often appears as pure intuition but this appearance underestimates the sophistication with which this skill may be developed (Connell, 1985). Mechanical descriptions and abstract opposites deny the relational reality of teachers' work in which

... teaching and learning are the transformations brought about through unique and living relationships. Because relationships happen between people, both teachers and students are teaching and learning. If this does not occur, the teacher's lessons cannot meet the particular needs of each student. (Metcalfe & Game, 2006, p. xi)

This relationality of teaching and learning co-produces educated people who have taken up and appropriated knowledge, skills and dispositions so that they can perform and transform embodied knowledge as knowing bodies. This work entails a complex mix of love and authority, of direction and discovery. It leaves no easily discernible mark on students yet inducts them into ways of being a member of society with distinctive capacities for action (for work, identity, and responsible use of power) that are framed by publicly accepted norms. It is a process of 'transformative work' (Connell, 1995) that, as Michael Kirby suggests, persists as traces and animations within and throughout student's lives. It is a 'pastoral pedagogy' (Meredyth, 1998) that gives

... individuals intense pedagogic attention, while applying regular norms and providing common resources ... [which] are ... heavily dependent on a centralised institutional capacity for close pedagogic attention, statistical normalisation, expert analysis and pastoral concern: a combined resource that so far, has been exclusive to bureaucratically organised education systems (whether State or denominational). (Meredyth, 1998)

Yet the intangible nature of teachers' work together with its socially significant impacts in the lives of individuals, communities and societies, renders teachers' work vulnerable both to limitless redefinition and intensification. Teachers are expected to teach a wider range of subjects (e.g. driver education, work experience, health and human relationships), and to take up responsibilities for inducting students into beliefs or appropriate ways of behaving that were once carried by other institutions – families, churches, workplaces. Because the nature of teaching cannot be tightly specified, it is subject to political redefinitions by employers who seek specific skill sets, or opinion shapers who dispute accepted narratives of nation and history. The lack of clear boundaries in the labour process is a major source of industrial conflict centred on the way boundaries and their contents are defined and framed (Bernstein, 1990; Robertson, 2000).

These features make the curriculum central to the analysis of the teaching labour process (Reid, 2003) and the politics of teachers' work. It defines what the student learns, and also defines the teacher's tasks. As an Australian teacher unionist put it, 'curriculum is an industrial issue'. Yet recent changes in the organisation of education have diversified the sites of teachers' work and the social relationships within which curriculum is constructed. The school may remain the key site in compulsory education but there has been a proliferation of post-compulsory learning spaces. Differentially-ranked universities, vocational colleges, workplaces and community education settings, as well as the vocationalisation of school education, have opened up curriculum decision making to different 'stakeholders' and subordinated it to market pressures. What is learned must be 'relevant' because learning provision is contingent on attracting sufficient enrolments, niche marketing content, and sustaining snappy advertising campaigns. Increasingly the type of learning space, the range and scale of resources that can be mobilised to support teaching and learning, and the kind of clientele and customer preferences, complement curriculum in defining the character and practices of teachers' work.

The contested character of curriculum, school organisation, diversity of learning spaces, and teaching-learning practices are evident in the debate on 'deskilling'. While teachers generally gained in skill and control over their work earlier in the twentieth century as dispersed small scale religious, community and family educational arrangements were brought within the umbrellas of bureaucratic state systems, it is argued that deskilling has been a feature of the late twentieth and early twenty-first century. This has been reflected in efforts to control curriculum. Programme learning was an early version which displaced teachers from their key position in the processes and relationships of student learning and reoriented them towards administrative tasks. Curriculum packages, computer-assisted learning, basic skills testing and competency-based training and assessment followed, curtailing teachers' discretion

and capacity for educational judgment, while expanding record keeping, reviews and reporting, in an endless burden of paper/computer work in a context of debates about deskilling and deprofessionalisation.

The Industrial Dynamics of Education Workplaces

Like all other workplaces, schools and other learning spaces have internal industrial politics and are subject to a wider industrial relations regime. This point is obvious but it has not always been addressed in school ethnographies or organisational studies. Equally, studies of industrial relations tend to focus on unions and the industrial system but not on the way industrial regimes impact on teachers and their work and workplaces. Studies of education policy, considering the wider relationships between teachers, educational workplaces and the state, also tend to overlook industrial relations in education.

Studies of educational workplaces (e.g. Dreeben, 1973) reveal the character of authority, the technical features (like layout of classrooms and building) and the norms or culture of the workplace and the wider institutional context. Yet late twentieth century changes in educational organisation and governance have highlighted the importance of issues of power and authority, control and conflict in teachers' work. These developments have problematised the idea of teacher professionalism and created chronic tensions around supervision and management in education.

During most of the twentieth century there has been a general shift in schools from direct 'line' authority to more indirect forms of control. These changing patterns of regulation have defined what counts as an acceptable 'professionalism', giving teachers some autonomy of action, but confining that autonomy within constraints, such as centrally controlled institutions, guidelines and an ethos of schooling (Grace, 1978; Harris, 2005; Locke, 2004). The scope for autonomy has varied widely between different systems and countries. For instance, there is some evidence to suggest that teachers in private schools come under more insistent scrutiny about deportment and dress, religious observance, and private life ('morals') than do teachers in state schools (Connell, 1985).

Changes in the late twentieth century indicate that there have been moves towards more direct patterns of authority and control. These changing patterns of authority are affected by the state and the way it changes over time, and by the state's problems of legitimacy. Indirect control and professionalism through the twentieth century was part of a broader trend to develop the state and schooling as an interventionist and ameliorative agency within welfare capitalism. Now, this educational regime based upon a regulatory state and centralised bureaucratic organisation of schooling is being challenged by social movements that seek to 'roll back the state'. They favour social regulation through markets and community-based networks, with a strong but small state to ensure law and order and steer social and economic policy at a distance.

In education this trend has meant that authority operates through economic relations, which are buttressed by direct control and hierarchical management within an educational marketplace. This state organised and supported education market creates a differentiated structure within which users (students, their parents or employers) exercise choice of learning space (e.g. school, university, workplace or community setting) through transactions mediated by qualifications and/or social networks (Strathdee, 2005). The effect is to shift established meritocratic selection and sorting processes on the basis of qualifications and increase access based on social and cultural capital. For teachers it has meant an increased stratification of educational workplaces together with increased accountability and performance pressures. The day to day work of teachers is increasingly framed by performance targets, indicators and managerial missions and visions which are experienced as increased individualised surveillance but often having little impact on the relationality of teachers work with students or the learning that is realised.

The social organisation of gender, especially the subordination of women, has particular implications in educational workplaces. Sexism in society at large presents difficulties for women teachers, particularly in situations such as the maintenance of classroom control in a large mixed high school, or in workplace administration where women are under-represented and hegemonic masculinities are privileged. These gender politics are further diffracted by racial and ethnic identifications, by class and sexual orientations. There is some evidence to suggest that the restructuring that has formed a managerialised education marketplace supports a re-traditionalisation of social relationships in education (e.g. the 'what about the boys' campaigns, a reassertion of hegemonic masculinities in management, and differential impacts of restructuring on men and women).

The large scale structures of gender and class, race and generation, the organisation of the state and civil society, and the international relations between states and economies, form a complex field of social forces bearing on education and its diverse workplaces. Within this field, and very much under its influence, the face-to-face participants (teachers, administrators, students, sometimes parents and employers) negotiate an internal political order or 'regime'. This regime - the pattern of power, consent, alliance and resistance, that is temporarily established as the basis for daily functioning - is central to the educational history of each education workplace. Likewise the regimes that predominate in a school system or sector are central to its history as a system. There is therefore a social basis for the notorious conservatism of school systems. On the one hand, this conservatism entrenches the influence of groups who have most reason to resist change, notably middle class, middle aged, bureaucratically trained men. On the other, it protects educational principles and traditions in the face of faddish change agendas. The exercise of power by neo-liberal governments over the last 30 years has operated as much through the redefinition and disruption of established education boundaries and cultural understandings (e.g. school and diverse learning spaces, general and vocational education, teacher-trainer-instructor) mediated by funding, curriculum, governance and accountability arrangements, as through direct interventions into the operations of education workplaces and the formation of teachers.

Power generates resistance. Teachers, like other workers, are active in confronting, evading or blunting control over their work. Where the overall policy of unions is strong, workplace unionism is a major form of defences. Teacher unionism, plus the state's historic push to indirect control, has sometimes opened a space for industrial

democracy. Where this is official policy, however symbolic, it can provide a venue for teachers to negotiate issues of control. In some schools principals seek some kind of endorsement for their policies from staff. Where unions are weak, such as in the United States and increasingly in other Anglo-Saxon countries pursuing market reform, resistance is more likely to be informal or individual. Yet even with teacherproof curriculum, competency frameworks, intensified workplaces, individualised performance management, teachers find ways of asserting some control over their work. There is evidence of teachers blunting the impact of curriculum packages, developing sophisticated strategies for playing a 'smoke and mirrors' game with performance targets and indicators, and, ultimately, drawing a line in the sand in relation to time spent doing work.

The Culture and Politics of Teachers' Work

The social patterning of teachers and their work has effects that are felt both in and beyond the classroom, school, or system. Teachers contribute to an economics of schooling and to the production of meaning and significance in educational workplaces. They make and remake a culture and organisation of work and so fuel political dynamics which cut across personal and institutional life and play a part in the broader social and historical movements of class and gender formation (Lawn & Grace, 1987).

Life history research has revealed how teachers experience and adjust to contradictions in their experience; for example, how the experience of being a teacher of working class origins in an English grammar school (Worpole, 1985), a Maori girl becoming a teacher in post-1945 New Zealand (Middleton, 1987), or a Puerto Rican woman becoming a university professor (Franquiz, 2005) shapes practice and, in some cases, politicises it. Living these contradictions can turn a complex lived experience into a conscious understanding of the way one's space for action is shaped by social limits and possibilities that are made and can be remade through political action (e.g. Goodson & Numan, 2002).

Resistance, conflict, debate and struggle are central to political action, as are the construction of narratives that open up alternatives, the negotiation of policies and principles the provide a framework for action, and organisational work that enables groups of people to coalesce around distinctive ways of seeing and acting in the world. Pressures to redefine teachers' working conditions and employment relations are experienced differently by different teachers. The young and old, those in compulsory education or adult education workplaces, can see new reforming discourses in quite different light, offering different patterns of constraint and opportunity. Teachers participate in the politics of reform as 'Old Turks' or 'Diehards', or by conservatively relinquishing public space through burnout, by withdrawing behind the classroom door, or by retiring early (Riseborough & Poppleton, 1991). Deskilling and proletarianisation are evident but as heterogenous trends shaped by the division of labour. They affect men and women of different ages in different ways. This is not a unidirectional 'degradation of work' but a complex redefinition of skill, rewards and identity formation. These local, personal and institutional politics contribute to broader discursive politics through which different groups struggle to win hearts and minds, and co-opt support for their experiences and commitments (e.g. Ball, 1990).

In all these cultural and political processes, the shaping and making of teachers' work can become part of broader social and historical movements with long term consequences. In South Africa a coloured woman's commitment to educating her students bring her into conflict with the apartheid regime. It leads to conscious political involvement in the struggle against apartheid and changing relationships with her family, friends, students and other teachers (Russell, 1989). Economic crisis in the Philippines has been accommodated through personal austerity by Filipino teachers but with consequences for their longer-term family life and their involvement in teacher organisations (del Fierro & Dalman, 1987).

In these cases, individuals' solutions to complex and contradictory circumstances have coalesced by sheer weight of numbers into a social force for remaking the social and educational order. But the way these mobilisations play out depend upon their social and historical circumstances. Mobilisation in the post-1945 period in, for example, Africa contributed to nationalist independence movements, which after independence were tamed by channelling teachers energies into personal security and career advancement (Dove, 1979). In the 1970s and 1980s mobilisation in new social movements fuelled backlash politics that coalesced in economic reforms and neo-liberal politics. What the trajectory beyond neo-liberalism will be remains to be seen.

Teachers, Power and Authority

This chapter has highlighted the significance and inter-related manifestations of power and authority in teachers' work and the need for an analytical framework that considers these aspects of teaching explicitly. It has outlined an approach to understanding power and authority by focusing on teachers as workers. Anchoring analysis in this way recognises the complex power relations that are centred on the employment relation. It provides a way of thinking about teachers as an occupational group that has features in common with other occupations but also distinctive features as a consequence of the job they do – educating the young, and increasingly older adults, by enabling learning. Approaching teachers in this way reveals the social relations of power which mobilise ongoing relational processes to form and shape teachers' work. The outcomes generated through these social processes are not just teachers and teaching techniques but a diverse network of entities and identities associated with educational work within particular historical and spatial locations.

This relational approach to teachers' work goes beyond a mechanical understanding of structure and agency and, instead, emphasises the social construction of teachers and their work through practices which constitute, shape and constrain the formation of teachers as entities-identities within relations of power. In this respect, the idea of 'structure and agency' does not presume that abstract individuals disconnected from their social settings are active agents and that those social settings made up of institutions and other structures are somehow inert, as if agentic people flowed within structural pipes.

Rather, the relational approach sees both individuals and institutions as particular forms of society (realised at different scales – body, local, national, global) which

are constituted as entitites-identities through everyday practical activity. Structureagency is therefore not a duality but the dynamic imbrication of entitites-identities with animating forces, which have been described as the 'inner strife and intrinsic contradictions' within social life that revolutionise practice (Marx, 1976/1845). It leads to 'persons speaking out of inner need' (Sennett, 1998, p. 148) in ways which articulate personal troubles, and it identifies social issues and mobilises practical action to address matters of shared concern (Mills, 1971). These relational processes are mediated by language, through the stories that individuals tell themselves and each other, as well as through institutional myths, policy advocacy and the rules and lived norms that define political regimes. So 'while agents engage with structures through reflexive interaction, structures themselves are often scripts of great social and cultural power which carry rules, resources and meanings for agents, thereby contextualising and legitimising their actions' (Axford, 2002).

From this relational perspective, teachers' work can be seen as a form of political action, in two respects. Firstly, teachers exercise power as an authority to teach which is legitimated as a consequence of their social position and occupational identity. This authorisation is contingent upon particular workplace regimes of power and control, and also broader patterns of institutionalisation – the way the state, the law, the world of work, the demands of civil society are constructed in specific historical and spatial contexts as a particular political regime with agreed frameworks which distinguish, regulate and resource social institutions and their practices. The definition of the teachers' job, its scale and character, its orchestration through governing processes, like curriculum, accountability measures and the preparation of teachers as workers, are all constituted within the large scale field of social forces that shapes societies and eras within relations of power. Yet the authorised work of the teacher within a particular regime of power does not absolve teachers from their wider roles as citizens with the right and responsibility to participate in the responsible use of power.

Secondly then, and regardless of the particular demands or constraints of their job, teachers exercise power as an authority to participate, and enable others to participate, in democratic politics. This responsibility to participate in responsible decisionmaking is legitimated as a consequence of their status as citizens in a democracy. In democratic citizenship, the power to act is critical to the formation of collective agencies that can act legitimately on behalf of the people and for the public good. The legitimacy of states, and the democratic politics which sustain them, are undercut when people's opinions about what should be done by or within the collective agency are marginalised or excluded (Davidson, 1997). In this regard, teachers are political actors because they contribute to industrial democracy and to democratic politics in ways that are not necessarily consistent with the specification of their job that is legitimised through their employment contract (Seddon & Mellor, 2006).

The complex relationship between teachers' work and political action, authorised respectively through their occupational and citizen status, is not fixed and immutable, but is constituted within long term social relationships. Research shows that the licensed autonomy which constructed teachers as professionals for much of the twentieth century has been rolled back alongside the wider redistribution of power from public to private sector, from the domain of people rights to the domain of property rights, in the early

twenty-first century, The examples which opened this chapter illustrate these contradictory views and political struggles. In this long-term trajectory, teachers' traditional work, and their authority to enable learning through intense individual engagement, has been troubled as the framework of publicly accepted norms which framed and legitimated their occupational practices and their practices as democratic citizens have shifted. In these times, teachers' work research has focused in on teachers 'speaking out of inner need' to problematise and mobilise around key tipping points in education. Proliferating research on globalisation and the re-scaling of education (e.g. as lifelong learning) and education governance, on the social organisation of knowledge via curriculum, professionalism, and research, and on teachers identity and self-work, are important fronts in this ongoing history of teachers' work and the active sites where teachers as workers and political actors are engaging in everyday practical politics.

Biographical Notes

Terri Seddon is Professor of Education at Monash University and Director of the Centre for Work and Learning Studies. Her research focuses on change and continuity in education (lifelong learning) and work. She has a special interest in teachers and their work and in the way teachers are being reorganized in contemporary contexts in which emerging knowledge-based economies confront challenges of social cohesion and citizenship. Her research has addressed teachers' work in school settings but increasingly focuses on adult educators work in vocational and higher education and in diversified and de-centred learning spaces formed in workplaces, communities and networks. Terri is currently a member of the Australian Research Council College of Experts involved in national competitive research assessments through the Social, Behavioural and Economic Sciences panel.

Phoebe Palmieri has worked in vocational education for more than 20 years, as an instructional designer, a manager, and for the last 10 years as an independent consultant and researcher. She has undertaken many professional development projects for teaching and other vocational education and training staff, and maintains her teaching currency by sessional teaching and by mentoring practitioner researchers. Her research interests, beginning in the area of flexible learning, now extend to areas more broadly related to teaching and learning. She is at present engaged on EdD research at Monash University, looking into aspects of the professional identity of TAFE teachers as described by teachers and students and in various literature streams.

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TEACHERS AS PROFESSIONALS: SALARIES, BENEFITS AND UNIONS

Nina Bascia

Introduction: The Complications of Teacher Professionalism

Are teachers professionals? Teachers have pondered this question for about 100 years – as long as they have worked in school systems. It is a question that provokes personal anxiety for many considering teaching careers. Some people associate professionalism with teachers' efforts to control their own occupation, but sometimes it has been used by outsiders – such as administrators and university professors – to assert their right to control teaching (Gitlin, 1996). Even when teachers use the term positively, it can mean many different things: individualism or collectivity, compliance with administrative regulations or autonomy, technical competence or political strength, protectionism or altruism. However ambiguous its meaning, professionalism is always a highly charged concept: merely posing the question of whether or not teachers are professionals introduces the possibility of doubt: perhaps they are not; perhaps, in other words, teachers' innate skills, training, and individual and collective behaviour are not worthy of respect. Many people assume that only teachers themselves can determine whether or not they will be viewed as professionals. It is commonly believed that teachers, individually and collectively, are responsible for how others view and treat them.

Teachers' concerns about their working conditions, their expressions of concern about job security, salary and benefits and their reliance on their unions to serve as their public face are often viewed as evidence that they are not behaving as professionals. True professionals don't complain; their first concern is always be for the public good; they should seek "intrinsic" (personal satisfaction) rather than "extrinsic" (specific, concrete rewards); discussing their salary in public is not only not polite, but it suggests they care more for their own pocketbooks than for their students. Indeed, actions such as walkouts and strikes, the withholding of services not spelled out in their collective agreements known as "working to rule", challenging the authority of governments and school officials embarrass many (but not all) teachers, not least because they seem so ineffective and, again, unprofessional.

These commonplace beliefs about professionalism are not only taken for granted in media portrayals of teachers; they also underlie a significant portion of the research on teachers and teaching. Such assumptions put teachers between a rock and a hard

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching, 481–489.* © Springer Science+Business Media LLC 2009 place. Teachers would like to be respected, paid well, and trusted to make decisions about how they practice teaching. But in many countries, they are not, and the situation is, if anything, getting worse: recent evidence suggests that they are not particularly well paid in relation to the skill and effort required to teach well, they have little decision making authority, they are faced with increased criticism by government officials and the media, and they face worsening working conditions, less job security, and get less career satisfaction than in the recent past. The growing accountability movement, by which governments or even international agencies exert pressure on teachers to perform according to certain standards or face negative consequences if they do not, is clear evidence that teachers are assumed to require external control; it has provided the rationale for weakening teachers' job security; and it has seriously eroded teachers' job satisfaction.

This chapter reviews the literature that explains what underlies the struggles teachers face under the rubric of professionalism by tracing the evolution of the concept, the evolving role of teacher unions in relation to issues of teacher professionalism, and what recent developments in the status of teaching suggest about teaching as both daily practice and long term career. It draws mainly on the history of teaching in Canada and United States but also describes recent developments in Australia, the United Kingdom, New Zealand and other countries. The first section focuses on where the idea of professionalism came from and how its meaning has been understood differently at different times. Then teacher unions' historical and current roles in relation to professionalism are described. The final section discusses recent trends in the conditions of teaching that suggest that, at least so far, professionalism is not within teachers' grasp.

Teacher Professionalism: An Attainable Goal?

What exactly is professionalism? What does it take for an occupation to be considered a profession? Sociologists who have studied so-called professional occupations, such as law and medicine, have concluded that they share certain characteristics that make them different from other occupational groups (Larson, 1977). Professionalized occupations possess status, respect and authority and are taken seriously by government and by the public at large. A professional body or association exists, and membership is a requirement for employment. They have considerable control over the conditions of their work and latitude to decide on the best courses of action in their practice. They evaluate and disseminate exclusive occupational knowledge, and training and entry requirements are controlled by the group itself rather than by another body such as government. They, rather than government, enforce a code of occupational ethics and conduct.

Teaching has been called a "semi-profession" (Etzioni, 1969) because it possesses few of these characteristics, at least to the extent that professional occupations have them. Government policies and regulations control mans aspects of teachers' work and careers. State, provincial or federal governmental bodies typically set training and entry requirements for teacher licensure. Pedagogy (how teachers teach), content (what they teach) and organization (the rules and routines that shape and control teaching) are determined by policy makers and administrators, not by teachers. Many of these policies are based on assumptions that to teach is to implement relatively uniform treatments for students – not to require that teachers master a wide array of possible teaching strategies and decide which strategies to use under different circumstances (Bascia & Hargreaves, 2000; Darling-Hammond, 1997). Teaching is assumed not to require highly esoteric knowledge or training; short pre-service and minimal in-service training sessions, mostly controlled by university or school system employees, are the norm; and teacher training is not highly valued because of the belief that teaching can't be taught; either it's an innate talent or "anyone" can do it.

Many educational policy researchers assume that an occupational group that wishes to increase its status and control over its work merely has to adopt the practices of professional occupations: for example, to uphold a code of ethics that ensures teachers do no harm. Administrators and policy makers often tell teachers that decision-making power cannot be handed over to them because they have not yet begun to demonstrate their professionalism. But some researchers suggest that this is backward logic: not every occupation that has attempted it has been permitted professional status. Some researchers believe this is related to whether an occupation was dominated mainly by women or by men: while physicians and lawyers were successful in wresting control over their occupational structure from others, teachers (like nurses and social workers) were not (Larson, 1977).

Teachers were first confronted by the claim that they were not professional with the establishment of school systems in the late nineteenth and early twentieth centuries. Large urban systems were designed according to the same "scientific management" concepts that were the basis for factory production and were headed up by a new class of managers who distinguished themselves from the teachers they supervised by claiming they held special scientific expertise (Darling-Hammond, 1997; Tyack, 1974). For the first time, how and what teachers taught, what they were paid and the terms by which they could be promoted to administration were regulated by a formal body - school system administration. Never before organized as an occupational group, teachers turned to union-style organization because it was the best and only strategic response available given their subordinate status in the new educational bureaucracies. While some researchers have criticised teacher unions for failing to establish a more politically powerful organized response, such options may not have been possible (Larson, 1977). Early teacher unions focused most of their attention on helping teachers prepare for the new conditions of employment and on limiting the negative effects of new administrative regulations that made their work difficult and that they believed were unfair (Smaller, 1991; Urban, 1982).

Most people, including educational researchers and teachers themselves, do not know this history, and they persist in maintaining that if teachers want to be treated as professionals, they must demonstrate that they have what it takes – they must look professional before governments will declare they are ready to take control over their own work. Without understanding this history, it may be easier to view teacher unions as blatant evidence that teachers are not professional, as if the unions were the cause rather than the symptom of teachers' low occupational status. And in fact unions around the world have come to believe that, while teachers' low status is not their fault, they must continue to work against the difficulties teachers face in their work and at the same time demonstrate the value and quality of teaching, because no one else will.

What Unions Do

What teacher unions can do on behalf of their members are determined by laws, usually labour laws. In Canada, teacher unions were recognized as teachers' official organizations as early as the 1930s and 1940s (in most Canadian provinces), but they had no formal right to participate in setting educational policy at the provincial level or to intervene in administrative decisions at district and school level for several decades. Educational officials were not required to listen to what they had to say, and because they had no legal standing, the practice called "meeting and conferring" became known among union leaders "begging and deferring". Collective bargaining was legalized province by province in Canada and state by state in the United States in the 1960s and 1970s (it is still not legal in 16 US states, mainly in the South), but the compromise worked out by lawmakers limited teachers' rights to representation as basic employment rights – the right to negotiate salary, benefits and working conditions, but not to formally participate in making policy (Carlson, 1992). State and local decision makers can listen to teacher representatives if they wish, or if they think it wise, but they have no obligation to do so.

Teachers first came to the notice of educational researchers when collective bargaining legislation meant that traditional decision-making authorities had to negotiate with teacher union leaders. Most of the research on teacher unions written in the 1960s and 1970s addressed decision makers' concerns that "militant" teachers would reduce the quality and breadth of educational decision making for administrators and policy makers. Several studies, however, reported that union presence actually resulted in more effective decisions because decision makers now had a better sense of what was going on in schools and school districts. These studies also suggested that rigid management-labour dynamics was often the result of administrators' fear of sharing power and expertise (Johnson, 1984).

Other research on teacher unions suggests that the limits on what can be discussed between union and management puts teachers at a disadvantage: if teachers have concerns about curriculum, programs, funding or other substantial educational issues, they can only try to persuase but because they are not legitimate decision makers, administrators and policy makers often view them as "overstepping their bounds" when they wish to bring up matters other than salary, benefits and working conditions. It means union officials spend a great deal of time and energy trying to establish, and re-establish, their credibility each time there is a change of government or administration. And it also means that, with few legitimate options at their disposal, teacher unions often find themselves channelling teachers' greater concerns about inadequate support, lack of respect and limited decision making authority through the inadequate terms of employer-employee relations. This is why what they publicly express is usually stated in terms of deserving a pay raise, or demanding fewer minutes of non-teaching time. And in turn these often public demands for more money or less time appear to suggest that teachers are obsessed with issues that are not of central importance to the quality of teaching and learning.

However trivial such demands may seem, *salary, benefits and working conditions* are important factors. Resources, relationships, roles, an appropriate degree of professional

autonomy, and opportunities to develop teaching skills both directly influence teaching quality and contribute to educators' sense of achievement and job satisfaction, serving to attract and retain teachers to the occupation in general as well as to particular schools and school district (Johnson, 1990; McLaughlin & Talbert, 2001). They are necessary to ensure quality learning conditions. Yet teacher unions are the only advocates: from policy-makers' point of view, influence of salary and working conditions on the quality of teaching and learning is not as direct and straightforward as other factors.

The quality of teachers' working conditions and the extent to which their salaries rise in relation to those of other occupational options have been quite susceptible to erosion over time. Even though collective agreements tend to be negotiated every few years and the number of contractual provisions tends to grow, not shrink over time, the unpredictability of educational funding, the changeability of educational policy and the prevailing belief that teaching can be effectively managed by a distant, centralized body mean that teachers frequently find themselves unhappy with the conditions of their employment. Besides negotiating collective agreements and utilizing the grievance process when teachers believe they are not being fairly treated, union officials attempt to influence teaching conditions through legislative lobbying, and by spending time meeting with teachers and administrators to resolve conflicts and attempting to determine what organizational conditions might be challenging effective teaching and learning. How much difference do unions' efforts in these domains make? There have been no studies that capture the direct relationship between union vigilance and teacher attraction and retention, but teachers who leave teaching identify the quality of working conditions as the most important factor influencing their decisions (Johnson, 1990; Yee, 1990). And teachers, even those who are not happy with all aspects of unions' activities, consistently say they believe that these organizations provide a necessary check against what they view as "administrative excesses" (Bascia, 1994). Beyond these benefits, teacher unions' interactions with formal decision makers on teachers' behalf also serve as a kind of feedback to system decision makers, providing a reality check about what's going on at the school and classroom level, that might very well not be available otherwise. In some cases, teacher unions collect and analyze data on educational conditions such as employment practices and the availability and quality of educational resources over time that school systems are either unable or unwilling to do so.

Providing *professional learning* for teachers has been another major area of activity for most if not all of teacher unions' histories. This has not been widely recognized. In fact, policy researchers have often criticized unions for what is seen as "trading" professional development funding away in favour of salary increases. But professional development is one of the major areas of teacher union activity. Professional development units are almost as common as collective bargaining units within teacher unions. Many provide workshops, conferences and study groups; in many provinces, states and local districts, days are set aside for these activities.

Beyond this, teacher unions continue to change the educational landscape by introducing whole new forms and topics of professional learning, often developed by or recommended by teacher members in response to a felt need for greater skills development. Unions increasingly support the development of teaching skills by sending trained coaches or mentors to work in classrooms with new teachers. They train teachers, and often also administrators, parents and community members to work effectively beyond their usual activities – for example, to participate in shared decision making, to conduct and analyze research, in fundraising and in promoting public education. Teacher unions also have developed a number of new kinds of learning strategies. Unions were some of the first organizational sponsors, for example, of school-based action research, of teacher-determined professional development, and of new teacher induction - practices that, once they had been initiated by educators through their unions, became of obvious value to school systems and were enshrined in policy and collective agreements (Bascia, 2008). While unions' role in mounting these innovations is not generally known, such practices actually do demonstrate the ways in which they act like professional organizations, taking responsibility for providing and determining the nature of teachers' ongoing learning. In recent years, as state- and district-supported professional development has become less available and more specifically focused on new policy directives, teacher unions have picked up the slack, providing more and more different kinds of learning opportunities.

A final way that teacher unions support professional learning is less formal than the strategies discussed above but at the same time very important: they provide opportunities for educators who wish to work on a project, introduce an innovative program, develop a broad skills base and a greater understanding of how the larger educational system works – skills that generally are not available to teachers unless or until they work their way into formal administrative roles such as principalships. In this way, teacher unions develop leadership skills that increase the capacity of the system at large because, in this way, more educators are learning how to make things happen.

Whether they do it well or poorly, teacher unions serve as teachers' *public voice*. As such, they have the power to contribute to the public discourse about teaching and schooling. Certainly they inform the discourse about teachers and teaching by negotiating the conditions of teaching through collective bargaining, by attempting to influence educational policy, and through statements they make in the press. Through these actions they can reinforce negative images of teachers or insist on more positive images - as victims or heroes, technicians, intellectual workers, political activists, and/or professionals (Bascia, 2000; Mitchell & Kerchner, 1983). In recent years, as the dominant discourse has become increasingly anti-education, many teachers' organizations have become convinced that they are uniquely situated to persuade the public to greater respect and support for education. Public relations, or "communications", is a common and increasingly active organizational function in teachers' organizations of any size. Some of the research they conduct and publish is intended to re-educate the public and politicians about problems affecting schools and possible solutions. As discussed earlier, learning how to promote local schools and districts has become one of the growing areas of union-sponsored professional development. In these activities, they essentially are attempting to redirect public understanding from viewing teachers as a social problem to seeing teachers, and unions themselves, as well-intended, skilled and committed guardians of public education.

The Challenges Unions Face

Teacher unions work to ensure competitive salaries and quality working conditions, to provide unique information for system decision making, to determine the content and form of teachers' professional learning, to cultivate educational leaders and to project positive, competent and committed images of teachers to the public and to decision-makers. Yet despite these efforts, they continue to be seen as being significantly responsible for teachers' inability to become recognized as professionals. There are several reasons for these perceptions. As suggested earlier, teacher unions are limited in their official roles by educational law. In many countries, teachers have not managed to establish enduring, authoritative organizations; educational administrators as well as states, provinces, and federal governments that have official, constitutional responsibility for education can, and often do, ignore what teacher unions have to say on behalf of their members. Union influence tends to be more informal than formal, episodic rather than constant.

Some educational historians believe that there is an enduring tension between educational systems' tendency to maintain bureaucratic control and the ability of teachers (as well as the public at large) to assert that they have a necessary and legitimate role in shaping educational directions (Tyack, 1991). In the past decade or two, educators have experienced the tensions between these two forces: many governments world-wide have increased their control over educational practice, reducing local decision-making authority over school funding, how funds will be spent, what will be taught and what kinds of accountability mechanisms are in place, and how teachers will be paid and evaluated. Both indirectly, because many of these decisions had been made at the local level with union involvement through collective bargaining and directly, through changes in labour legislation, teacher unions have much less ability now than in the past to respond effectively to teachers' concerns.

Teacher unions have lost some of their momentum in other ways. At the same time, there has been a significant turnover of teachers, partly because the large number of teachers hired to serve growing school systems in the 1960s through the 1990s has retired and partly because, in many parts of the world, teachers' working conditions have deteriorated. The new generation of teachers does not have the personal experience of union representation and is slower to turn to their organization; when they do, they find less to be excited about given the above paragraph than their predecessors.

In many western countries, less money is being put into education than in the past. In order to manage a less well-funded system, administrators in some countries have increased the extent to which they employ teachers in part-time, non-permanent jobs. For example, in the United States, "Teach for America" and "Troops to Teachers" are ways to bring individuals into teaching without necessarily expecting them to remain for more than a few years. In the United Kingdom, "teacher recruitment agencies" employ teachers and then deploy them to schools where staffs are lacking; here, too, there is no expectation that teaching will be a long-term career. The number of part-time teachers has grown in Canada as well. This growing cadre of teachers has not (yet) been able to get teacher unions to represent their issues, partly because they lack the kind of permanent employment that could make them eligible for union representation. Teacher unions' ability to act on teachers' behalf is also reduced as many governments authorize exemptions from union membership. In some Australian states, the system of "enterprise bargaining" means that teachers are employed by and contract with individual schools rather than school districts, giving administrators greater power to set working conditions; in the United States, charter schools and other contract waiver situations are similar in the way that teachers' employment conditions are set without union involvement.

All of these new practices challenge teachers' claims of being, or wanting to be seen as, professionals. Teacher unions, while not the cause, and somewhat crippled by these events, are nonetheless implicated: these are very similar to the kinds of issues that teachers were confronted with a century ago, when they began organizing for the first time. In the late 1980s and early 1990s, New Zealand and the United Kingdom both outlawed teacher unions as part of their efforts to dismantle and decentralize their educational systems, but in both countries the governments came to recognize that teacher unions will rise, phoenix-like, out of the challenges they and teachers face. While the picture looks bleak now, it may well be just the latest episode in the enduring dynamic, never yet resolved, between efforts to manage huge educational systems and efforts to ensure that teachers gain the conditions that allow them to perform the sophisticated, complex array of tasks that teaching comprises.

Biographical Note

Nina Bascia is a Professor in the Department of Theory & Policy Studies in the Ontario Institute for Studies in Education of the University of Toronto. Her research and teaching focus on educational policy and organizational factors that shape teaching, learning and leadership. She is the author of Unions in Teachers' Professional Lives (1994) and co-editor of The Contexts of Teaching in Secondary Schools (1990), Making a Difference About Difference (1996), The Sharp Edge of Educational Change (2000), The International Handbook of Educational Policy (2005) and Learning Through Community – Exploring Participatory Practices (2007).

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TEACHER BURNOUT AND TEACHER RESILIENCE: ASSESSING THE IMPACTS OF THE SCHOOL ACCOUNTABILITY MOVEMENT

A. Gary Dworkin

Burnout is a ubiquitous concept in the social sciences, education and business administration. The concept has been evoked to account for any negative attitude about a role, a relationship, or a line of activity. In fact, a generation ago, *Time* magazine declared the existence of the "burnout of almost everybody" (Morrow, 1981, p. 84). Burnout has been cited as the cause of loss of interest and enthusiasm about a job, a marriage, a life style, or recreational activities. However, a more precise application of the concept of burnout is usually applied to the work of human service professionals and their loss of enthusiasm toward their work and an increased desire on their part to quit. The concept was coined by the clinical psychologist H. J. Freudenberger (1974) to describe the "wearing out" of human service professionals whose clients, patients, or students seem not to improve, recover, or learn. The malady is characterized by emotional exhaustion and a lost sense of personal accomplishment. The workers no longer perform their roles effectively and sometimes even become hostile or uncaring about those with whom they are charged to serve.

Within a few years of the publication of the Freudenberger article clinical psychologists conceptualized three dimensions of burnout and constructed scales for their measurement. The three themes that emerged from their work were: emotional exhaustion; a loss of a sense of personal accomplishment; and depersonalization, or the blaming the client, patient, or student for the sense of diminished accomplishments and the general burnout malaise (Cherniss, 1980, 1992; Maslach, 1978a, 1978b, 1993; Maslach & Jackson, 1981). Psychologists determined that burnout is a personal malady resulting from the inability to cope with stress and the stressors associated with the work role. The clinical approach to burnout tended to "blame" the victim of burnout and what logically followed were strategies to enhance coping skills, ranging from stress management training to holistic health care and yoga (Cedoline, 1982; Farber, 1991; Gold & Roth, 1993; Pines, 1993; Shaw, Bensky, & Dixon, 1981; Swick & Hanley, 1983).

Another psychological approach to burnout links the construct to threats to one's sense of identity and a desire to see one's work as meaningful. Burnout so conceptualized by Alaya Pines (1993) represents an "existential crisis." That is, professionals (and many other individuals in post-industrial societies) come to derive their self-concept and self-esteem from their work roles. It is not uncommon for Americans and others to

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introduce themselves to others by noting what they do as workers. Studies of professionals who retire indicate that many develop a sense of aimlessness and diminished self-esteem once their careers ends. Against this context, burned out human service professionals, no longer having a sense of the meaningfulness of their work, ask "Why am I doing what I am doing?" In short, the professionals experience a crisis of existence.

Counterpoised against the clinical approach that sees burnout as a personal malady caused by the lack of coping skills is a sociological approach that explores how structurally and organizationally-induced variables themselves serve as stressors that produce burnout or that conversely, insulate individuals from burnout-inducing stressors. While this sociological approach does not deny the role of stressors in burnout, it suggests that organizational changes may be necessary to promote teacher resilience. The sociological perspective views burnout as a form of role-specific alienation that can be created by structural and organizational barriers to effect role performances (Dworkin, 1987, 1997, 2001, 2007; Dworkin, Saha, & Hill, 2003; Dworkin & Townsend, 1994; LeCompte & Dworkin, 1991). This approach has viewed burnout as a form of work role alienation. The studies assert that burnout includes all of the dimensions of alienation described by Seeman (1959, 1975): powerlessness; meaninglessness; normlessness; isolation; and estrangement.

- Alienation implies a gap between expectations and experiences. Each of the components of burnout are indicators of that gap:
- Teachers who feel that they are unable to perform their roles as their pre-service training had led them to expect develop sense that they are *powerless* to exercise control over central aspects of their work (Shinn, 1982).
- If their activities do not produce positive results, including improved learning by their students, they come to see their work as *meaningless*.
- Often teachers withdraw emotionally from their students and their colleagues, thereby promoting a sense of *isolation*. Social class or ethnic differences between teachers and student exacerbate that sense of isolation.
- Teachers question whether the compromises they have to make in performing their roles are consistent with their central values and their self-image. Serious discrepancies between their values and the activities they are forced to engage in, lead teachers to develop a sense of *estrangement* from the teaching role.
- A sense of *normlessness* arises out of the other elements of alienation when teachers believe that school rules or district mandates are dysfunctional, or that such policies are unenforceable or un-interpretable (Sparks & Hammond, 1981). Frequent changes in school standards, practices, and policies and well as the frequent and changing overlay of new research designs intended to improve student learning under the aegis of external accountability mandates can lead teachers to perceive that clear norms for teaching are either non-existent or contradictory.

External Accountability Systems and Teacher Burnout

Externally-imposed school accountability systems have become a common element in many developed nations of the world and are increasingly common many developing nations. Even countries that do not have national curricula have sometimes embraced

some form of standardized achievement testing of students. Elbaz-Luwisch has observed that large-scale, cross-national assessments of student learning outcomes, including those by the IEA (International Association for the Evaluation of Education Achievement, "... have put increased pressure on state educational systems to demonstrate their effectiveness in producing competitive test results, often overshadowing more vital concerns such as preparing students for adult life, for competent citizenship and economic productivity" (2007, p. 658). Accountability standards have resulted in increases in teacher workloads (Hargreaves, 1994) and efforts to teacher-proof curricula, or what Apple (1987) termed "deskilling." In countries where OECD's PISA (Program for International Student Assessment) or the TIMSS (Trends in International Math and Science Study) data are used to make assessments of educational systems results cannot be disaggregated by students, teachers, or schools. Therefore results of the tests have affected national pride without necessarily benefiting or challenging individual educators. This is not to suggest that educational systems are free from pressures to raise test scores. Results of the 2000 and 2003 PISA ranked Finland highest and leaders in other countries called for their schools to copy the Finnish model. Any change in the national rankings is likely to result in the adoption of a new model. In turn, changes in models adopted by nations will have ramifications for the morale of teachers in those countries.

When test score results can be disaggregated to students, teachers, and campuses, the likelihood that test results will directly affect the morale of teachers increases exponentially. The disaggregation of results frequently means that praise or blame can be ascribed to individuals and organizations. When this happens, the phenomenon is termed "high-stakes testing." High-stakes testing refers to the use of achievement tests taken by students as the sole or principal evaluation instrument in awarding an educational outcome (grade promotion or retention), or to assess teachers, school administrators, schools, or school districts, including the likelihood of their continued employment, continued operation, level of funding, or certification. High-stakes assessments tend to be external evaluation systems because they are often imposed from outside the school system, or mandated by business, the public, or governments in response to external definitions that the schools are failing. Often the schools played a minor role in the crafting of the tests, or education agencies or governments had the tests created on the basis of educational standards developed by political bodies.

High-Stakes Testing in the United States

The forces that resulted in the emergence of high-stakes testing in the United States are well documented. They started with calls for greater school accountability took the form of the Standards-Based Reform Movement (usually called the Standards Movement), which emerged in the 1980s after the publication of *A Nation at Risk* (1983) by the National Commission on Excellence in Education. The commission received its charge from President Ronald Reagan. The corporate sector and social conservatives had charged that by placing a greater emphasis on humanistic and multicultural issues, the public schools of the 1960s and 1970s had abandoned educational "basics" and caused a decline in student achievement. The 1983 report declared that unless massive educational reforms implemented and student achievement improved,

American industry's competitive position in the growing global marketplace was in jeopardy. This rhetoric is what Berliner and Biddle (1995) labeled *The Manufactured Crisis*. Their book offered a cogent critique of *A Nation at Risk*, as it presented evidence that an ulterior motive of the report was to discredit the public schools sufficiently enough to enhance private school vouchers and the ability of elites to redirect their tax dollars to those private institutions.

Public opinion-mirrored the commission's dire warnings. Years earlier, when the first Gallup Poll of public confidence in the public schools was published at the end of the 1960s, half of the American public gave grades of "A" and "B" to the performance of the nation's schools and a higher percentage gave similar grades to their local schools (Elam, Rose, & Gallup, 1993). By the time of the publication of *A Nation at Risk* (1983), less than one third of Americans gave high marks to the public schools.

Since the emergence of the Standards Movement in the 1980s, there have been numerous school reform efforts. All phases of the Standards Movement have made two assumptions about teachers, students, and assessment. Since its emergence in the 1980 through the *No Child Left Behind Act of 2001* (NCLB), the Standards Movement has assumed that:

- 1. Low student achievement is a product of incompetence and the lack of proper motivation on the part of teachers, school administrators, and schools. Highstakes accountability systems that include the prospect of draconian punishments for failure will create the necessary incentives for school personnel to work harder for the benefit of their students. This model of teacher and student motivation has been severely criticized by Amrein and Berliner (2002).
- 2. The cause of low student achievement is simply poor teaching and can be assessed by a single indicator such as annual standardized tests that accurately measure what students learn. These tests are based on what students need to know in order to become productive citizens who will maintain the competitiveness of the United States in a global economy.

The assumption of teacher blame is an over simplification that ignores certain realities of education in a diverse society. Most teachers work very hard but many, especially in large urban school districts, have classrooms filled with students who come to school with numerous academic, social, and personal disadvantages that arise from home and community environments and from poverty and racism. The Standards Movement including NCLB does not consider a "value added approach," whereby improvement rather than test passing rates, is the measure of school accountability.

Accountability systems that prescribe the use of a single annual achievement test violate appropriate test theory (Dworkin, 2005; Heubert & Hauser, 1999). Each test is an estimate of a student's "true score" and is subject to "regression effects." However, Kane and Steiger (2002) reported that among high-poverty students year-by-year or test-by-test variability in scores is quite common. Because of myriad events that affect students in minority and low-income neighborhoods and families, one test score may not predict the next test score. Furthermore, some children do less well on standardized, multiple choice tests than they do on other measures of their learning. Thus, portfolios of multiple indicators are preferable to a single test score. However,

multiple measures are more expensive, more difficult to interpret, and do not provide a unitary score that stakeholders demand.

Blaming and punishing teachers for shortcomings in the learning outcomes of students ignores the reality that factors outside of the control of schools often exert a significant effect upon student knowledge acquisition. Ironically, schools that assign their better teachers to classes of low-performing place these teachers in jeopardy. In models of accountability that focus on improved passing rates rather than test score gains, good teachers assigned to work with the lowest-performing students could face disciplinary action or termination if their students only make significant gains, but still do not reach the test's passing threshold. NCLB has especially been faulted for this all-or-nothing strategy.

Phases of the Standards Movement

There have been five waves of reform attempted since the beginning of the Standards Movement. After 1983, states implemented reforms intended to "... introduce uniformity and conformity through standardized curricula, rigorous requirements for student performance, promotion and graduation, and teacher evaluation" (Smylie & Denny, 1990). The reforms attempted to insure that only competent teachers were in the classroom and that graduates of the public school would be competent employees for American industry.

These reforms did not raise student achievement and consequently a second stage of reforms was proposed under the administration of the first President Bush in 1991. He called for "world class standards" and "break the mold schools" in his program, *America 2000*. The cause of low student achievement was determined to be the result of excessive centralization of America's schools. *Goals 2000* proposed to move decision-making closer to what occurred in the classrooms. Legislatures ordered decision making to be decentralized to the individual campuses, and this process was termed "Site-based Decision Making". As Dworkin and Townsend (1994) discovered, site-based systems often resulted in "turf battles" between principals, teachers, and parents over control of the schools. The resulting conflicts negatively affected teacher morale without raising student achievement. Under the Clinton administration the program became known as *Goals 2000*, resulting in the *Elementary and Secondary Education Act of 1994*, as known as the *Improving America's Schools Act of 1994*. It too, failed to raise student achievement.

By 1994, Texas and some other states began their own form of school reform through the implementation of "high-stakes testing." Schools could be closed and/or teachers and administrators fired if student achievement did not improve. Improvement was measured by the percentage of students at a school who passed a test, rather than gains in achievement. Again, assessment was based on thresholds rather than improvement, per se. Schools that raised test scores of low-performing students who nonetheless failed the tests were subject to draconian measures, including closure and teacher firings. These high-stakes accountability policies continued to depress teacher morale and sometimes led schools, principals, and teachers to "game the system" and cheat (Booher-Jennings, 2005).

Aspects of the Texas Accountability System, including high-stakes testing, were incorporated into the current reauthorization of Public Law 8910, the Elementary and

Secondary Education Act of 1965, known in its present form as the *No Child Left Behind Act of 2001*. In order to receive federal funds, including the federal subsidized lunch program, states had to submit a plan which promised that 95% of students in schools would be tested and 100% of those tested would be proficient (defined as passing a state-selected standardized test) by the academic year 2013–2014. Schools were to be assessed in terms of making "Adequate Yearly Progress" (AYP). Schools that fail to meet AYP over several years face severe consequences: the loss of some Title I funds (federal funds for low-income schools); the loss of enrollment as students are given public school choice to attend a school meeting its AYP goals; the termination of staff (from the principal and teachers to the custodial staff); and campus closure and reorganization as a charter school.

Measuring the Effects of the Standards Movement on Teacher Burnout

Over the past 30 years I have surveyed teachers and recorded the changes in teacher morale and burnout as different waves of school reform have been implemented, especially in Texas schools. Prior to the Standards Movement teacher burnout varied inversely with years of teaching experience, although there was some curvilinearity to the pattern. Burnout was the malady of neophytes in the years prior to school accountability standards. Using a cross-sectional analysis of data on cohorts of teachers, mean burnout scores were moderate for the newest teachers, increased slightly during the first 5 years, and then slowly declined over the next 30 years of experience (Dworkin, 1987). Following the states' implementation of accountability systems in response to *A Nation at Risk* (1983), the pattern changed. More experienced teachers were affected, as well as gender and ethnic sub-groups of teachers. These varying patterns have been discussed by Dworkin and Townsend (1994) and Dworkin (1997, 2001, 2007).

Figure 1 displays these patterns across six time periods, each demarcated by changes in the nature of the accountability systems. The *x*-axis in Fig. 1 represents the number of years teaching as reported by survey respondents. The values on the *y*-axis are normalized burnout scores (expressed as *z*-scores), which permit comparisons of results across different reform waves. The burnout scale is a sociological one, based on the dimensions of alienation reported by Seeman (1959, 1975). Dworkin, Chafetz, and Dworkin (1986), Dworkin (1987, 2000) discuss the psychometric properties of the "Dworkin Teacher Burnout Scale," also referred to as the "Alienational Burnout Scale" (Dworkin, 1997, 2000). The scale itself was constructed through the use of factor analysis and scores are reported as in *z*-scores. Positive scores reflect higher levels of burnout and negative scores lower levels of burnout. As a standard score, the mean is zero and the standard deviation is one.

Pre-Reform Data

Line one describes the burnout scores for teachers by years teaching. The sample is 3,444 Houston area teachers. The data, collected in 1977, depict progressively lower burnout levels among teachers after the third year (the end of the probationary period).



Fig. 1 Burnout by years teaching for each school reform era

Even the highest mean burnout scores were significantly below those of teachers during any of the Standards Movement reform periods. Burnout existed, but the scores had to be adjusted (standardized) in order to conform to the same metric during the later reform phases. Thus, the *z*-scores would have been higher and some within the positive (higher burnout) range if scale scores for other periods were not also included. Burnout was highest among young, white teachers and especially teachers assigned to schools where the principal was seen as unsupportive, uncaring and uncollegial.

A Nation at Risk Data

The second line represents data collected on 1,060 Houston area teachers in 1986, after Texas had implemented competency testing for teachers and reclassified teachers downward on the career ladder system (tied to pay increases that ultimately were never implemented because of the lack of funds). Although the test was a minimum skills test, passable by most middle school students and over 95% of the teachers passed the test, competency testing was nonetheless a new and stressful experience to teachers who had come to think of themselves as skilled professionals. Assessment also included in-class observations by school district personnel (or by the principal) and

this further challenged the self-image of teachers as experts. It further denied teachers the sense of autonomy often expected by professionals (Duke, 1984). During this period of reform principals had to serve as evaluators of teachers, which challenged the perception of their supportiveness and collegiality. Mean burnout scores were significantly higher than had been found prior to the reforms and were especially high among teachers with 10–15 years of experience. Burnout scores were highest among minority teachers during the period.

The Site-Based Decision Making Data

The third line in Fig. 1 is based on a small sample of 261 Houston area teachers surveyed in 1991. Teacher evaluation was no longer novel. The implementation of reforms was more often taken for granted than had been the case 5 years earlier and this was reflected in lower mean burnout scores. The accountability system of the previous period was still in place, continuing to challenge the sense of professionalism held by experienced teachers. These more senior teachers were most likely to be involved in stressful "turf battles" with the principal and parent committees under the site-based plans. The teachers from experience levels associated previously with the highest mean burnout scores also had the highest burnout scores in 1991.

High-Stakes Testing Period Data

The 2000 data set consisted of 2,961 Houston area teachers. Texas had adopted the Texas Assessment of Academic Skills test (TAAS), a high-stakes standardized test in 1994 and gradually implemented more accountability consequences into it, including the closing of schools and the termination of teachers. With a standardized student achievement test fully in place, rather than either an easy competency test or an evaluation by a principal, teacher evaluation became removed from the control of teachers or even campuses. Other than by cheating or gaming, test scores were not subject to manipulation, and were yet a further step removed from the actual classroom behaviors of the teachers. During prior evaluations teachers had control over the way in which they presented curricula. However, they had much less control over how well their students assimilated the curricula and translated it into multiple-choice answers on a standardized test. Now the fate of schools and the careers of teachers in the accountability drama.

The introduction of high-stakes testing had dramatic effects on teachers. One striking aspect of the fourth line in Fig. 1 is the significantly higher mean burnout scores of the most experienced teachers. Teachers with 20 or more years of experience had the highest burnout scores in this period. In fact, teachers with 30 years of experience had mean burnout scores that were as high as the highest observed during the reforms following the publications of *A Nation at Risk* in the 1980s, when accountability was first implemented. It is possible that some of the respondents to the 2000 survey who had been teaching for 20–30 years were the same individuals who had high burnout scores in 1986, when they had been teaching for 10–15 years. However, the highest

scores in 1986 were from minority-group teachers, while the highest scores in 2000 were found for teachers from all ethnic groups, and especially white teachers working in high-poverty, minority schools. Experienced teachers, and especially those teaching in high-poverty schools, are challenged by the low student achievement of children who bring few academic resources from their home environments. The work is difficult and many of the most senior teachers are more expert at classroom management and discipline than at teaching to a standardized test that by law changes each year. Teachers who were close to retirement were under the most stress, hoping that they could avoid losing their jobs due to school closures before retirement age.

No Child Left Behind Data

The fifth and sixth sets of lines in Fig. 1 represent two periods of the implementation of the current *No Child Left Behind Act of 2001*. The first data set was collected from a survey of Houston area teachers in 2002, soon after the implementation of the law, while the second data set was obtained in 2004, after most elements of the law were fully in place. NCLB not only required schools to meet AYP standards that escalated each year, but also implemented a mandate that teachers had to be "Highly Qualified." This standard was met if the teacher had a degree and/or certification in the subject matter she/he taught. Although there were subsequent modifications and exceptions adopted after 2004, the law meant that many teachers had to re-qualify for certification, a procedure that involved testing.

By 2003, Texas replaced the TAAS test with a more rigorous exam, the Texas Assessment of Knowledge and Skills (TAKS), and mandated an end to social promotion, or the practice of passing students who failed the test on to the next grade. Students, who failed the reading section of the TAKS in third grade, or the reading and/or math sections of the TAKS in fifth grade or in eighth grade, would have to retake the exam and possibly go to summer school. If they continued to fail the test, they could be required to repeat the grade. An exit version of the test (TAKS and earlier the TAAS) was a requirement for graduation since the 1990s. Re-certification and the pressure to raise student achievement high enough that retention-in-grade was minimized negatively affected teacher morale.

Mean burnout scores for both of the NCLB era data sets are similar. Possibly because of the "Highly Qualified" rule, they are higher than those in the 2000 data when high-stakes testing was only a state mandate. One striking difference between the NCLB era data and the data from 2000 is that the most experienced teachers no longer have the highest mean burnout scores. Part of the change may have been due to the retirement of some of the most burned out senior teachers and part from the realization that wholesale firings of senior faculty were unlikely as the state continued to experience substantial increases in student enrollment. The Texas Education Agency reported that student enrollments grew between 2000 and 2004 from 3.99 million students taught by 268,000 teachers in 2000 to 4.31 million students taught by 289,000 teachers in 2004 (Texas Education Agency Academic Excellence Indicator System for 2000 and 2004).

As Fig. 1 displays, burnout patterns vary with years of experience and those patterns are modified in the different school reform efforts. Prior to the Standards Movement

burnout was most often the malaise of inexperienced teachers. Dworkin (1987, p. 155) reported that burned out teachers were most likely white teachers; teachers assigned to schools whose student body racial composition they did not prefer; who were racially different and isolated from the student body; who reported experiencing discrimination that they attributed to racial issues; who had sources of income other than their teaching salary to rely upon (including from a spouse with a much larger income than that of the teacher); who did not get along with their principals; and who believed that fate, chance and luck determined their destinies (external locus of control) more than any of their own actions. Burnout was further exacerbated when teachers defined their jobs as stressful and saw their principals as uncollegial, unsupportive, or treated them as expendable. Burnout per se did not vary by gender. However, male teachers were more likely to quit teaching if they experienced burnout, in part because men at the time (1977) and even today have many more career alternatives to teaching than do women.

The Standards-Based Reform Movement in its various phases altered the context of teacher burnout. Accountability systems deny teachers their sense of professional status, including their sense of professional autonomy. Teachers are required to take competency tests long after they have completed their pre-service coursework in college and even after they gained tenure. The more recent components of the Standards Movement include high-stakes testing of students with ramifications for the continued operation of schools and the continued employment of the teachers at those schools. Yet, reliance upon high-stakes tests further separates the teacher from his or her performance. When accountability consisted of the demonstration of observable skills, teachers could exercise some control over the display of expertise. However, when the measure of competency is based on the performance of the teachers' students, professional control is further distanced from the teachers.

Additionally, the use of quantified test scores, externally imposed, and machine tallied at a state agency, means that groups of teachers who might have had a privileged status at their schools no longer have advantages and are just as threatened as any other instructor. This de-personalizing aspect of accountability can alter the demography of who burns out and who does not. Most notably, all ethnic groups of teachers are likely to burn out, but male teachers are now more likely to experience burnout than female teachers, as their relatively higher gender status is countered by the more "objective standard" of a student test score (Dworkin, 2007).

Teacher Burnout and Teacher Resilience

The Standards-Based Reform Movement has altered the patterns and extent of teacher burnout, but it has not altered questions of why some teachers burn out and others do not. The clinical psychological approach argues that some teachers have better coping skills or personalities that allow them to resist the negative effects of stress. The sociological approach asks what organizational factors and social networks are available to mitigate job stress and facilitate coping. Perhaps because of the growing push toward school accountability in many nations, concerns about teacher burnout and the question of teacher resilience have recently resurfaced in the literature of the social psychology of education.

Resilience has been defined as "... the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances" (Masten, Best, & Garmezy, 1990, p. 425). Similarly, Bernshausen and Cunningham (2001) defined resilience as the ability to bounce back after encountering stressful conditions. While Bobek (2002, p. 202) noted that, "A teacher's resilience is enhanced when he is capable of assessing adverse situations, recognizing options for coping, and arriving at appropriate solutions." The central elements of resilience were enumerated by Howard and Johnson (2004) as they described how some Australian teachers cope successfully in situations that produce burnout among many others. Key characteristics of the resilient teacher included a strong sense of agency (i.e., internal locus of control), or the feeling that they could control any situation; a tendency no to dwell on past mistakes or failures in an agonizing fashion; a capacity to depersonalize unpleasant experiences and thereby understand them analytically; and a strong moral sense of purpose, such that one comes to see work in troubled, and hence burnout-prone schools as a challenge driven by a desire to make a difference. Finally, resilient teachers have strong support groups, including colleagues and administrators who value their efforts.

Evers, Tomic, and Brouwers (2005) reported that teachers who engage in "maladaptive thinking" are less resilient and more likely to burn out. Such individuals cannot cope with rejection, believe in so-called "magical thinking," whereby superstitions dominate their attributions, and engage in rigid, "dichotomous thinking," often involving simple answers to complex issues. These patterns of non-resilience are quite similar to what was described as an external general expectancy or external locus of control first identified by Rotter (1966) and later by Lefcourt (1976). Dworkin (1987) reported that burned out teachers were significantly more likely to be externals, who believed that fate, chance, and luck controlled their destinies, while internals who did not burn out believed that they were responsible for shaping their own destines. Similar to locus of control is the sense of self-efficacy. Friedman (2003) reported that a strong sense of self-efficacy in interpersonal relations within the school as an organization and in relations within the classroom reduced the sense of burnout among Israeli teachers.

Clinical strategies that help teachers to adopt a sense of agency, to depersonalize negative experiences, to develop a sense of calling and strong moral, to cease to engage in maladaptive and categorical thinking or to acquire a sense of self-efficacy (i.e., an internal locus of control) may be effective in enhancing resilience. They require one-on-one approaches to the development of coping skills, but they do not attack organizational and structural problems that teachers experience. A more cost-effective approach would be organizational, structural, and policy changes that promote teacher efficacy. Such changes to the organization of schools might promote what can be called "organizationally facilitated resilience" as a means of mitigating teacher burnout.

In their discussion of resilience among teachers, Howard and Johnson (2004) also recognize the significant role of social support networks, including supportive co-workers and administrators. Likewise, policies and practices at schools can have the effect of stifling teacher enthusiasm. Gaziel (2004) observed that restrictive and unsupportive

behaviors of principals are often implicated in low teacher morale and high teacher absenteeism. Dysfunctional organizational rules and administrative actions tell teachers that they are in toxic work environment or that they are considered expendable employees. Such messages deny teachers the opportunity to develop a sense of agency (Howard & Johnson, 2004) or efficacy (Friedman, 2003).

Schools faced with accountability standards easily become rule bureaucracies, in which arbitrary policies are mindlessly imposed and strip teachers of their professional identities. Low-performing schools, under threat by accountability mandates, have developed policies that are frantic responses to such external threats. In one Houston area school with particularly low test scores, the principal decided that a more professional teacher dress code would be a first step toward higher achievement. The principal ordered that all female teachers must wear pantyhose all year long. Summer school teachers in classrooms with inadequate air conditioning had to follow the rule even when the temperatures outdoors were near 100°F. In another instance, a large school district was concerned about claims that teachers helped students cheat on the state-mandated, high-stakes test by erasing wrong answers on the scan sheets and replacing them with correct one. The district ordered the teachers to break off the erasers on each student's pencil just before the test. Of course, this did mean that students who legitimately wanted to change their answers during the test were unable to do so and test scores for the district declined that year.

Finally, professional status means that teachers develop their own lesson plans. In another high-poverty, low-performing school the principal informed the teachers that she did not think they were competent enough to develop quality lesson plans for the year. Instead, she herself wrote up a unitary lesson plan that was to be used in all grades and subjects. The plan was useful in some subjects, but not in others, and further informed the teachers that they were not trusted to do a task expected of "real teachers."

The role of administrators in facilitating resilience or in reducing the probability of teacher burnout can be illustrated from the following study of teacher burnout. Using a sub-sample of 291 teacher surveys, Dworkin (1987) constructed four statistical types of principals reported by the teachers and he then examined the relationship between job stress and teacher burnout for each of the types. However, the relationship between stress and burnout varied by principal type. The four kinds of principals were as follows: (1) principals who were seen by their teachers as supportive and effective in making changes; (2) principals who were seen as unsupportive but effective; (3) principals who were seen as supportive but ineffective; and finally (4) principals who were seen as unsupportive and ineffective. Levels of reported job stress were homogeneous across the four categories of principals. When the principals were seen as supportive, regardless of whether they also were perceived to be effective, the regression coefficient between stress and burnout was not significant. Rather, a personality component of the teacher (locus of control) was implicated in linking stress to burnout. However, when the principals were seen as unsupportive, regardless of whether they were seen as effective, the regression coefficient between stress and burnout was statistically significant. In my conceptualization of burnout as role-specific alienation, the principal affects the extent to which teachers perceive their role as meaningless.

A supportive principal tells the teachers that their efforts are valued and this breaks the functional connection between stress and burnout.

A follow-up study by Dworkin, Haney, Dworkin, and Telschow (1990) compared the effect of supportive principals and supportive colleagues on the linkage between stress and burnout. While most co-workers were supportive when the principal was supportive, the effect size of principal support was significantly larger than that of co-workers. Further, when the principal was unsupportive but co-workers offered support the link between stress and burnout remained strong. Hence, principals are better able than colleagues to provide the support necessary to make stressful work situations less burnout-inducing. When there is little or no principal support, co-workers cannot compensate and reduce the likelihood of stress or burnout. It is probable that under the condition of little support for principals most of one's colleagues are likely to burn out, too and that militates against the effectiveness of co-worker support.

The two studies describe above were conducted during the pre-reform era. Are the patterns of principal and co-worker support observed prior to the Standards Movement likely to function in a similar fashion in an ear of high-stakes standardized testing under NCLB, where teacher assessment is distanced from actual teaching and rests upon the performance of students? This question was addressed in a survey conducted by my research team in 2006. The study had a sample of 1,388 urban public school teachers in the Houston area. Particular attention was focused on the inter-mix among principal support, co-worker support, perceived job stress, and burnout, along with an array of covariates.

Table 1 presents the results of a regression analysis of the survey data. Covariates included demographic characteristics of the teachers, including ethnicity, gender, years teaching (expressed as a squared function because of the curvilinear nature of the relationship between years teaching and burnout), and grade level taught. Preliminary analysis eliminated academic degrees as a useful covariate. Perceptions about the school were incorporated into the model, including whether the campus was seen as safe and secure

Independent variables	b	SE (<i>b</i>)	β	t	p (<)
Asian-American teacher	.143	.142	.021	1.06	NS
African-American teacher	.148	.050	.067	3.00	.003
Hispanic teacher	.130	.063	.047	2.08	.037
Female teacher	127	.054	050	-2.36	.018
Years teaching squared	.005	.004	.029	1.33	NS
Grade level taught	052	.020	063	-2.63	.009
Safe & secure school	171	.028	170	-6.08	.0001
External locus of control	176	.027	169	-6.60	.0001
Job stress	.433	.024	.433	18.03	.0001
Supportive principal	222	.031	218	-7.15	.0001
Supportive co-workers	105	.031	102	-3.42	.001
Intercept	.095	.075		1.26	NS

Table 1 Predictors of teacher burnout under high-stakes testing conditions (n = 1,388)

Adjusted $R^2 = .627$

NS not significant

(a relative absence of gang activities, drugs, and risks to personal safety or the safety of one's possessions) and whether the teacher had an external locus of control. Key independent variables were the perceived level of job-related stress, perceived supportiveness of the principal, and perceived supportiveness of co-workers.

When burnout was regressed only on the support and stress variables (without the other covariates in Table 1), the standardized effect of stress was $\beta = .500$, while the effects of principal support was $\beta = -.267$ and co-worker support was $\beta = -.147$. Job stress is the most powerful predictor of burnout; principal support is nearly twice as effective in reducing burnout as is co-worker support. With the covariates in place, stress remains the strongest predictor of burnout, having an effect size of $\beta = .433$. Principal support reduces burnout, as does co-worker support, but now the respective coefficients are $\beta = -.218$ and $\beta = -.102$. Principal support remains more than twice as effective in reducing burnout as is co-worker support.

Next the perceptions of the supportiveness of principals were categorized as had been done in the pre-reform study. The scales for principal support and co-worker support are expressed as z-scores. The distribution of scores were trichotomized and scores that were less than one standard deviation below the mean were defined as non-supportive and scores that were more than one standard deviation above the mean were defined as supportive. Separate regressions were run to assess the effect of job stress on burnout under conditions of supportive and unsupportive principals and co-workers. The covariates were included in the analyses, but are not reported in Table 2. The relationship between job stress and burnout remained strong under all conditions of support by principals and by co-workers. When principals were seen as supportive, the effect of stress on burnout was $\beta = .326$ and when principals were seen as unsupportive the effect of stress on burnout was $\beta = .574$. Likewise, when co-workers were seen as supportive, stress has an effect size on burnout of $\beta =$.421 and when co-workers were seen as unsupportive the effect of stress on burnout was $\beta = .526$. While support either from the principal or co-workers attenuated the association between job stress and burnout slightly, it did not eliminate the effect of stress on burnout. Expressed differently, when high-stakes accountability systems are in place and teacher assessment depends upon student test scores rather than observational measures conducted by principals or when such assessments are not mandated, the level of job stress cannot be mitigated by social support. Under NCLB poor performances by students have negative consequences for all school personnel,

Condition	1.	SE(L)	Q	4	
	D	SE (0)	ρ	l	p (<)
Supportive principal ($n = 500$)	.260	.053	.326	4.86	.001
Unsupportive principal $(n = 216)$.531	.060	.574	8.87	.001
Supportive co-worker ($n = 235$)	.364	.059	.421	6.20	.001
Unsupportive co-worker ($n = 243$)	.485	.061	.526	7.93	.001

 Table 2
 The effect of job stress on burnout under differing conditions of principal and co-worker support

teachers, their co-workers, and the principal. High-stakes testing has the potential of countering support or even resiliency in reducing the likelihood of teacher burnout.

Summary and Conclusions

Public school teachers experience higher than average rates of job stress and burnout than most college-educated workers. As far back as 1932, the sociologist Willard Waller commented on the high rate at which teachers became discouraged and quit their jobs, even in the years of the Great Depression. Teachers are expected to work long hours, without compensation for the time spent bringing work home, and generally are paid relatively low salaries. Teachers who work with children, who because of poverty and racial discrimination, bring many academic disadvantages to school, are often expected to work even longer and harder. Schools in blighted neighborhoods are frequently under-staffed and lack necessary material resources. Teachers sometimes have to "make do" with less than they need to raise student achievement. Conditions in high-poverty schools, as well as in many less-disadvantaged schools, make teaching a stressful occupation.

Job stress is a central precondition of burnout, both from the clinical psychological perspective and the sociological perspective. The psychological approach views burnout as a failure to cope with stress and manifests itself in emotional exhaustion, the loss of a sense personal accomplishment, and a tendency to depersonalize relations, especially with students, who the teachers see as the cause for their lost sense of accomplishment. The sociological approach portrays burnout as an organizational and structural problem that results in role-specific alienation. Burnout comprises the dimensions of alienation described by Seeman (1959, 1975), including feelings of powerlessness, meaninglessness, normlessness, isolation, and estrangement. The unit of analysis in psychology, and especially clinical psychology is the individual. Consequently, strategies to address burnout are individualistic, intended to make teachers more resilient and better able to cope with stress. Sociological orientations emphasize structural and organizational causes, including the imposition of the social structure on groups and individuals. The redress of burnout as seen by sociologists usually involves making structural changes to organizations in order to reduce job stress.

A growing stressor that teachers face has been the emergence of the Standards-based Reform Movement (Standards Movement) in education that began in the 1980s. Concerns of business, governmental, and public stakeholder regarding student achievement and the prospect of declining competitiveness of national economies have exacerbated job stress and burnout among teachers, who are often blamed for not working hard enough to raise student standardized achievement tests scores. Early components of the reforms included competency testing of teachers and a call for linking salary to student learning outcomes. The latest reforms include high-stakes testing, in which student achievement outcomes can be used to close schools and terminate all staff. The *No Child Left Behind Act of 2001* (NCLB) provides an example of such reforms. Using a 30 years of survey data, this chapter has examined the impact of progressive changes in school reform on the level and patterns of teacher burnout. Data were collected in the Houston metropolitan area (United States).

Compared to pre-reform data of the 1970s, the various manifestations of the Standards Movement has increased burnout and adversely affected more experienced teachers. High-stakes testing, unlike earlier reform components that specified direct observations of teacher performances or that included standardized testing of teachers, makes teachers even more powerless and prone to burn out. High-stakes testing relies on improvements in student passing rates on standardized tests. Teachers can exercise some agency over their own test taking or over the content of the lesson they teach during an observation. However, when evaluations are based on the performances of their students on standardized tests, teachers are distanced from the evaluation process by one further step.

Many investigators have begun to focus on the characteristics of resilient teachers, who exercise agency and a sense of control over their work situation, do not dwell excessively on failures, accept challenges, and who seek to make a positive difference in the lives of children. As a psychological approach the focus of much resiliency research has been on enhancing individual skills. However, resiliency research has also focused on support networks, including those involving co-workers and the campus principal. Social support systems have been found to break the functional connection between stress and burnout, by allowing teachers to understand that their work is meaningful to their colleagues and administrators. Much of the work on the role of administrator or colleague support on the relationship between stress and burnout has been based on data collected prior to the reforms that included high-stakes testing and the prospect of school closings and terminations when passage rates on tests do not improve.

Data presented in this chapter suggest that while social support systems can affect the functional connection between job stress and burnout, they no longer can insulate teachers from stress or burnout. This is partly due to the fact that the most recent reforms and especially those under NCLB place all teachers and the principal in jeopardy. Stressed individuals merely exacerbate one another's stress levels.

The intent of this chapter was to examine how school reforms that emerged out of the Standards Movement have altered levels of patterns of teacher burnout. No attention has been placed on how burnout affects teacher turnover or student achievement. Previous work addressed these issues (Dworkin, 1987, 1997). However, it is appropriate in closing to summarize some of the consequences of teacher burnout.

It seems logical that teacher burnout is implicated in teacher turnover. Job stress and burnout sap teachers of enthusiasm and have been linked to increased teacher absenteeism (Gaziel, 2004; Leiter, 1991). However, the long-term effects of burnout on teacher turnover remain problematic. This is because professionals who have invested educational efforts in a job do not regularly quit without prospects of other employment. What may more likely happen is that they withdraw enthusiasm and the willingness to make extra efforts in their work. In short, their commitment wanes. Twenty years ago this seemed to be the case partly because most public school teachers are women and career opportunities outside of teaching and the other semi-professions have historically been limited for women. Thus, when Dworkin (1987) reported on a 5-year follow-up of every teacher in the pre-reform sample who was burned out and expressed a desire to leave teaching, those with skills that had analogues in the private sector (especially math, science, industrial arts, business) were seven time more likely to have quit than those whose skills focus on working with little children. However, professional careers for women have expanded significantly. A majority of college-educated women do not consider public school teaching as a career option. Among those who do, the prospect of leaving public education in light of job stress and burnout is likely more enticing. Staffing reports from the US Department of Education and from state education agencies indicate that there are critical shortages of teachers, especially in high demand areas such as science, math, and bilingual/English as a second language instruction. Many of the shortages are partially a result of deployment patterns rather than actual shortages (Ingersoll, 2007). However, urban school districts have in recent years offered bonuses to teachers willing to come to their schools. Some high-poverty, inner-city schools lose most of their new faculty each year.

Burnout does involve the removal of positive affect and energy from teaching. In the pre-reform period burned out teachers seemed to have little negative effect on the achievement of average and low-performing students, but reduced by 20% the academic gains of previously high-achieving students (Dworkin, 1987). However, Pamela Tobe (in Chap. 73 of this book) reports in "Value-added Models of Teacher Effects" that teacher burnout affects teacher performances with the result that gain scores on Texas' standardized achievement test are significantly lower for all groups of students. In a time of high-stakes testing and potentially draconian consequences for students, teachers, and schools, teacher burnout seems to have far-reaching effects. Diminished student achievement in turn can result in student grade-retention, which especially in later grades can result in higher student dropout rates.

Biographical Note

A. Gary Dworkin is Professor of Sociology and co-founder of the Sociology of Education Research Group (SERG) at the University of Houston in Texas, USA and a former chair of the Department of Sociology. Currently, he is Secretary of Research Committee 04 (Sociology of Education) of the International Sociological Association. He has served on the Council of the Sociology of Education section of the American Sociological Association and as President of the Southwestern Sociological Association. His publications include ten books and numerous articles on teacher burnout and student dropout behavior, minority-majority relations and gender roles, and the assessment of school accountability systems. Recently, Dworkin published essays on accountability and high-stakes testing under The No Child Left Behind Act in the journal Sociology of Education (2005), in Sadovnik et al., No Child Left Behind and the Reduction of the Achievement Gap: Sociological Perspectives on Federal Education Policy (Routledge 2007) and on the unintended consequences of school accountability in the International Journal of Contemporary Sociology (2008). He also assessed the effects of retention-in-grade (with Jon Lorence, published by the Brookings Institution in Washington, D.C., 2002). Dworkin (with Rosalind J. Dworkin) wrote three editions of The Minority Report, a race, ethnic, and gender relations book (3rd edition published by Wadsworth 1999). Among some of his earlier books on teachers and teaching are Teacher Burnout in the Public Schools (SUNY Press, 1987), When Teachers Give Up (Hogg Foundation/Texas Press, 1985) and Giving Up on School (with Margaret D. LeCompte, Corwin/Sage Press, 1991).

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TEACHERS AND PROMOTION: RESEARCH EVIDENCE ON THE ROLE OF GENDER, CAREER INTENTIONS, PROMOTION CRITERIA AND TEACHER SATISFACTION

Ping-Man Wong

Many occupations and all professions offer their recruits the opportunity of pursuing a career, in the sense that individuals can be promoted through a clearly delineated promotions hierarchy. This aspect of a career is referred as its vertical mobility dimension (Ladinsky, 1963; Maclean, 1992). Promotion can therefore be regarded as the passage to a higher rank. In management, promotion is one of the reinforcers of the rewards system to help motivating employees. Other rewards include pay, recognition, desirable work assignments, autonomy and participation (Robbins & Coulter, 2002). From a motivation perspective, if rewards are allocated only on non-performance factors, such as seniority, job title, or across-the-board pay raises, employees are likely to reduce their efforts. As stated by the Peter Principle (Peter Hull, 1969), in a hierarchy using promotion solely as a reward for good performance, people tend to rise to their level of competence because good performance in one job is no guarantee of good performance in another. That is why the pay-for-performance programmes or compensation plans are gaining in popularity.

Within most of the education systems, given a relatively fixed pay structure, teacher promotion is still a more important factor in motivation. Recently, many policymakers have proposed merit-pay programmes that link teachers' salaries directly to their apparent impact on student achievement. They are concerned that the current rewards system makes it difficult to retain talented teachers and provide teachers with new incentives to raise student achievement (Jacob & Lefgen, 2006).

There is another concern that the concepts of job satisfaction and promotion are not strongly related. While explicit and defensible criteria for promotion are important in maintaining and enhancing teacher morale and effectiveness, the wish to gain promotion does not explain the career behaviour of all teachers. Teachers define success and failure in their employment in a variety of ways, and are motivated for different reasons. According to Maclean (1992), teachers seeking promotion wish to maximize their influence and power within their school, to have more freedom in their work and to establish new challenges in order to relieve or reduce the threat of boredom. Additional money

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associated with promotion is not regarded as very important. On the other hand, some teachers do not seek promotion because they are not willing to move between schools in various parts of the state or get involved with the administrative side of things. All these make teacher promotion a complex issue.

This chapter is a review of recent work in the sociology of education focusing on teachers and promotion. Most of the research evidence comes from the United Kingdom, Australia and New Zealand although Nordic countries, Cyprus, Hong Kong and the United States are also mentioned. The important issues emerged in the literature include gender issues, career intentions and promotion criteria, and the satisfaction level of schoolteachers. In this chapter, they are explored separately after an introduction of the background to the sociological perspective.

The Teaching Career

While there are a wide array of research studies from a variety of disciplines such as economics, psychology and management, those of relevance to the study of teachers' careers, have been primarily the concern of scholars in the sociology of work and occupations particularly from about the 1940s onwards (Becker, 1952; Geer, 1966; Hall, 1948; Hughes, 1949, 1952, 1958, 1971; Roth, 1963; Whyte, 1943). According to Nosow and Form (1962), the sociology of work and occupations is a sub-discipline of sociology and it includes five substantive themes which are: (1) the social nature of work and related phenomenon such as leisure activities, (2) the analysis of occupational structure and the causes of changes within it, (3) the study of an individual occupation in terms matters such as recruitment, training and careers, (4) the ways in which the occupational structure and individual occupations articulate with other segments of society, and (5) the study of a particular occupation in order to highlight a problem in the broader society.

Teaching, as an occupation may be defined as "relatively continuous patterns of activities that provide workers with a livelihood and define their general social status" (Form, 1968, p. 245). As a career, teaching also implies a long term commitment on the part of a person to obtaining promotion, through the status hierarchy that exists in their occupation (Pavalko, 1971). The study of career patterns and promotion in teaching is designed to provide a deeper understanding of the behaviour, perceptions and occupational culture of school teachers as an occupational group. The promotion system is of central importance and concern to many teachers because it is the means by which highly valued phenomena such as money, status, prestige and power are allocated between individuals. As such it can be said to have a powerful influence upon such matters as the way in which teachers direct their energies, perceive their roles, and develop an occupational identity (Maclean, 1992).

Teaching is also commonly regarded as a profession meaning an occupation with higher prestige, status and esteem. In the United Kingdom, teaching has traditionally been located in the second highest category of professions, which also contains the professions of librarianship, social work, etc. with medicine and law appearing in the highest category (Hoyle, 2001).

Gender Issues

Gender issues in teacher promotion have been a consistently strong issue in the literature for a number of decades. Until the early 1970s, female teachers in Western Australia were severely restricted in their profession by lower pay and forced resignation from permanent positions upon marriage (Bloot & Browne, 1996). In the late 1970s and early 1980s, the imbalance of promotional opportunities for females and males continued throughout the world (Kauppinen-Toropainen & Lammi, 1993). Hilsum and Start (1974) initiated a comprehensive study of promotion and careers in teaching and Sampson (1985) worked on the factors affecting the promotion of male versus female teachers in Australian state education systems. Around more or less the same time, the main study in New Zealand (New Zealand Department of Education, 1982) on teachers' careers placed particular emphasis on the promotion and careers of women teachers.

Bloot and Browne (1996) identified from the literature nine major clusters of factors that emerged as reasons for the underrepresentation of females in promotional positions in education. These include (1) policies and regulations, e.g., in Western Australia, prior to changes in regulations regarding equal pay (1971), maternity leave (1968) and permanency for married women (1972), there was little incentive for women to upgrade their qualifications or think in terms of a promotional career (Hutchison, 1981; Miland, 1984; Scraton, 1990; Steward, 1976), (2) patriarchy within the Education System, that women are profoundly disadvantaged in terms of career rewards by male dominance in administrative positions. The decision-makers, being in most cases male, make personal evaluations based on a range of stereotyped assumptions that favour the male and disadvantage the female. (Apple, 1986; Ball, 1987; Connell, 1985; Davies, 1990; Hoferek, 1986; Evans & Davies, 1988; Knoppers, 1989; Sampson, 1986), (3) gender-role stereotyping, that expectations about individuals are based not only on their capabilities and personality traits as people, but on their sex. These stereotypes, portraying the female as subordinate, are a major banner inhibiting women from developing their full potential in the full range of career opportunities (Al-Khalifa, 1989; Ball, 1987; Davies, 1990; Dyer, 1986; Griffin, 1989; Hoferek, 1986; Knoppers, 1989), (4) the male model of leadership, that the traditional male dominance of decision-making positions, and emergent model of leadership has resulted in a tendency to measure aspiring females against such male-oriented criteria, and find them deficient. These criteria include the aggressive competitive behaviours, emphasis on control rather than collaboration and negotiation, and the pursuit of competition rather than shared problem-solving. The style of management being promoted tends to be the one that women generally do not find attractive or difficult to meet. Certain traditionally female attributes, such as skills in interpersonal relationships tend to be overlooked as qualifications for promotion despite their relevance in today's schools in which pastoral care and interaction with the community are increasing in importance (Ball, 1987; Bryson, 1987; Davies, 1990; Knoppers, 1989; Smith, 1988), (5) family commitments, that there has been little rethinking in a changing society regarding the automatic allocation of family roles according to sex, regardless of individual interest, talent or qualifications. Notwithstanding the removal

of discriminatory policies, many women are still forced to choose between career and family. This serves to maintain male-dominant structures in the education system (Al-Khalifa, 1989; Ball, 1987; Bryson, 1987; Sampson, 1986), (6) the low promotional orientation of women, that the lack of interest in promotion by female teachers was largely a product of gender-role stereotyping and the socialisation process that neither encourages nor provides incentives for females to aspire to career advancement to the same extent as males (McKinnon, 1975; Sarros, 1983). The other view holds that females lacked awareness of the promotional process and the confidence to pursue more aggressively a promotional path of their own accord (Acker, 1983; Ball, 1987; Sampson, 1986; Whitcombe, 1980), (7) women's own perception, that many women do not appear to consider themselves as potential leaders. Some highly capable women also fear that if promoted, they will lose aspects of the job they value (Al-Khalifa, 1989; Ball, 1987; Hoferek, 1986; Sampson, 1986), (8) lack of skills and experience, that the opportunity for promotion for the majority of females is such a recent development, females average fewer years of teaching experience, fewer years on permanent staff and low qualifications than males, and have less opportunities to try themselves on everyday organizational and administrative tasks (Hutchison, 1981: Sampson, 1986: Spender, 1982), (9) lack of encouragement and support, that many women fail to receive the initial patronage and support in their applications for promotion. The differential encouragement provided to females and males by significant others confirmed the social perception that leadership and decision-making in administration was more appropriate for males (Davies, 1990; De Lyon and Migniuolo, 1989; Ellis, 1987; Sadker, Sadker, & Klein, 1991; Sampson, 1986).

As a result, while the teaching profession has become increasingly female particularly in the primary sector in the United Kingdom, Nordic countries, the United States and elsewhere, men tend to acquire a disproportionate number of high status/ senior posts especially at the levels of promotion to vice-principals, principals or headmaster/ headmistresses (Howson, 1998; Kauppinen-Toropainen & Lammi, 1993; Penn and McQuail, 1997). In the study of Wong and Wong (2005), even when the gender issue of Hong Kong in terms of equal promotion opportunities for teachers is not so obvious, gender still emerges as a perceived factor influencing actual promotion. For those teachers who have not been promoted, male teachers believe they will have a higher chance of getting promotion. Male teachers are also more satisfied with promotion than female teachers. With reference to Weiner's (1994) three main components of feminism (the political, the critical and the practical), Thornton and Bricheno (2000) studied the relationship between gender, role, position and promotion aspirations of primary school teachers in England and Wales. They found that while reported reasons for not seeking or achieving promotion were multifaceted, the known and experienced disproportionate promotion of men, plus the frequently traditional gender differences in work - home orientation and contextual/ situational expectations, contrived to limit career development for a significant number of women. Female and male respondents also indicated different areas of concern and influence on their careers. The study challenges the simplistic suggestion that increases recruitment of males into teaching, and a proposed new career structure will resolve the gender imbalance in power and status (Skelton, 1991).

Promotion Criteria and Career Intentions

Fluctuations in demand for teachers in the past few decades have drawn the attention of scholars to focus research on the promotion criteria and career intentions of teachers. In the 1950s and 1960s, there was a great expansion in the number of government schools in countries like Britain, the United States and Australia because of the baby boom and the expansion of secondary education, both of which resulted in increasing school enrolments after World War 2 (Phillips, 1985; Spaull, 1977). This increased the demand for school teachers, created more promotion opportunities for those within the occupation (Hilsum & Start, 1974; Lortie, 1975). There were also studies on teacher promotion (New Zealand Department of Education, 1982; Maclean & Lonergan, 1984; Maclean, 1989; Maclean, 1992, Abbott-Chapman, Hull, Maclean, McCann, & Wylide, 1991) at a time when there was a reduced demand for teachers as a result of falling numbers within the relevant age cohorts and stabilizing participation rates in schools, affecting the teacher student ratio, reduced teacher recruitment level and promotion opportunities.

In the studies of Hilsum and Start (1974), Lyons (1981), and the New Zealand Department of Education (1982), teachers were presented with a list of 31 possible factors that could be seen to affect promotion. In the Hilsum and Start (1974) study which was conducted in England and Wales, the ten items most frequently chosen by teachers from the list were being a graduate, specialism in shortage subject, social contacts, conformity with the views of advisors, good relations with school principal, length of teaching experience, course attendance, variety of schools taught, extra curricula work, and familiarity with new ideas in education. The results obtained were very similar with the study in New Zealand. In another study for teachers in further education in England and Wales, Gallop and Gagg (1972) found that factors chosen by teachers affecting promotion were being in the right place at the right time, educational experience, industrial experience, hard work, exceptional leadership qualities, having the right background, and luck.

Based on findings of related studies (Caplow, 1954; Dalton, 1951; Hughes, 1958; Glaser, 1968; Lyons, 1981; Pavalko, 1971), Maclean (1992) summed up the promotion criteria into three categories, namely the formal criteria, informal factors and career contingency factors. Formal criteria usually refer to factors such as a person's formal qualifications, type and level of experience within the occupation, and suitability for the promotion position in question. Informal factors include a person's religion, social class, ethnicity, political affiliation, and participation in accepted organizations. The three main career contingency factors include age, sex and marital status. It is argued that the informal attributes of individuals are more powerful than the formally stated ones in determining who get promoted. Chew, Stott, and Boon (2003) also suggest that in Singapore, apart from the job performance and the institutionally defined criteria for determining the promotion and career development of teachers as principals, other important factors include the role of their family in equipping them with future success in the education system, access to higher educational qualifications and opportunities for sponsorship by significant others in their social network of relationships. At present, with the introduction of fair employment legislations in various countries, the use of most of the informal factors would be illegal, though it is still doubtful how much these legislations are successful in improving the promotional prospects for women, or reducing the use of such criteria. In some countries, the employment and promotion of teachers is exempted from fair employment legislation because it is argued that teachers from a specific religious or ethnic group are required to teach children from the same background as themselves.

Apart from the promotion criteria, there is also concern on the individual dimensions of career decision-making. Draper and McMichael (2000) are concerned with the questions about motivation for seeking or avoiding promotions in school. They argue that less attention has been paid to the individual dimensions of career decision and yet it is at the individual level that decisions about careers are made. Recent consideration of the development needs of teachers, for example, the emerging proposals for a framework for continuing professional development (CPD) and McCrone's (2000) recommendations on CPD in the United Kingdoms reflect a recognition that individual teachers may find roles which suit or satisfy them at different points in schools' hierarchies.

As reported by Draper and McMichael (2000), five elements of identity have been drawn from the literature (Ball & Goodson, 1985; Evetts, 1994; Nias, 1989) as follows: (1) career orientation, taken positively or negatively, stresses the emphasis an individual gives to moving into higher levels of management, (2) subject identity expresses the degree to which individuals value their subject, (3) management identity with positive and negative items draws on items from career identity and subject identity, and emphasises management self concepts, (4) out of school identities explore the degree to which an individual has professional, management and career interests that are pursued out of school (Alexander, Havard, Leishman, & Wright, 1991), (5) disenchanted identity represents regret at having chosen the present career and a wish to leave the current job and take an alternative if offered it (Day & Bakioglu, 1996).

Bobbitt, Faupel, and Faupel (1991) distinguished movers, stayers and leavers from teachers varying in their career plans and intentions. Movers were those seeking promotion, stayers were those who did not and leavers were those who did not plan to stay in teaching. The model was further developed by Draper, Fraser, and Taylor (1998) with the addition of stoppers, teachers who had sought promotion in the past but were not planning to do so again and starters, who were planning to apply for promotion for the first time.

Draper and McMichael (2000) examined the assumption of inevitability of applying for promotion by considering those who were interested in applying for promotion beyond "Principal Teacher" (head of subject department) level in secondary schools. They compared the differences between movers and stoppers drawing on the five elements of identity from literature namely, career orientation, subject, management, out of school and disenchanted identities (Ball & Goodson, 1985; Evetts, 1994; Nias, 1989). It was found that the intention to apply for promotion was related to these identities, e.g. movers identified more with management than a particular subject and had a strong consciousness of career considerations. Gender emerged more strongly as a perceived factor influencing actual promotion than it did in teachers' decision to apply, and there was greater enthusiasm for promotion amongst the younger staff.

Teachers' Satisfaction

Recently, the studies of teachers' promotion are related to teachers' job satisfaction and dissatisfaction. Perennial factors, such as student achievement, helping students, positive relationships with colleagues and self growth have been associated with teacher job satisfaction, while other factors such as perceived low status, low pay, lack of professional autonomy and deprofessionalisation have been linked to teacher dissatisfaction (Dinham & Scott, 1988, 2000; Hargreaves, 1994; Hean & Garrett, 2001; McNess, Broadfoot, & Osborn, 2003; Osborn, McNess, Broadfoot, Pollard, & Triggs, 2000; Van den Berg, 2002). According to the majority of these studies mainly in the developed countries, teacher satisfaction and thus commitment is clearly related to levels of intrinsic motivation. To a certain extent, this is contrary to studies suggesting the importance of extrinsic motivators to teachers' commitment to school, and among these motivators, the reward systems in terms of promotion is obviously an important one (Hackman & Oldham, 1971, 1975; Herzberg, 1968).

To explain the diverse scenario, Dinham and Scott (2000) argued for the existence of a "third domain", i.e. the context of social and political characteristics in school (Spear, Gould, & Lee, 2000) that has a major influence in determining how teachers feel about their work. Using Cyprus as an example, Zembylas and Papanastasiou (2004, 2006) identified the sources of teachers' satisfaction and dissatisfaction in a developing country. Teachers emphasised their satisfaction with interactions with students, relationships held with colleagues and opportunities to contribute to the growth of individuals and the development of society. Sources of dissatisfaction were social problems and their impact on teachers' work, students' lack of interest and bad behaviour, the centralised system and the lack of professional autonomy in schools, and teacher evaluation and promotion prospects.

The study of Hong Kong provides an example of having only one promotion grade for teachers beyond the posts of vice-principal and principal, permanent promotion posts and the promoted teachers losing his/ her status if he or she resigns and seeks employment in another school. Wong and Wong (2003) illustrated that teachers not yet promoted in Hong Kong achieved less in preparation programmes and had less incentive to apply what they learned to their current schools. Adapting the work of Brayfield & Rothe (1951), Campion (1988), Tyler & Bies (1990), Maclean (1992), Meyer, Allen & Smith (1993), Tyler, Degoey & Smith (1996), Draper & McMichael (2000) and Ko (2003), Wong and Wong (2005) explored the relationship between teachers' promotion and their satisfaction under the current teacher promotion exercise in Hong Kong. In the study, the level of satisfaction with promotion was quite low for teachers. On a five-point scale, the mean score was only 2.80 with standard deviation of .97. The mean score for the unpromoted teachers was 2.6 which was even lower. The study also suggested that there were different views about promotion from teachers and principals. Teachers believed the promotion system had put more emphases on "personal relationships with decision makers", "demographics", and "social
affiliation", while principals believed that they had put more emphases on "teaching ability and potential" and "administrative ability and potential". These discrepancies helped indicate that enhancing teachers' satisfaction on the promotion exercise was not just a matter of developing mutually accepted criteria or procedures, but to ensure those criteria or procedures developed would not be jeopardized by poor communication or unfavourable human factors.

Another contextual factor that affects promotion as an effective motivator of teachers' satisfaction is the global development of School-based management (SBM) since the late 1980s (Wong & Wong, 2003, 2005). School-based Management is at base a proposal to decentralize and debureaucratize school administration and to promote participatory decision-making in different levels of each school (Caldwell & Spinks, 1988, 1992; Sackney & Dibski, 1994; Cheng, 1996; Leithwood & Menzies, 1998; Hanson, 2003). While SBM takes different forms in different places, successful implementation of the management approach depends on the involvement and contribution of teachers and their motivation or commitment to the approach is essential.

Chew et al. (2003) contend that teachers are sometimes disappointed and puzzled as how promotions under the current system are decided upon, which has deteriorated the morale of teachers in school. It is doubtful whether the current promotion and rewards system are sufficiently motivating teachers in light of the increased teacher responsibilities under SBM, as what the same management approach is doing in business, for two reasons (1) The ideals of decentralization, empowerment and participatory decision-making with regard to the reward systems are not new in business and rewards in business are aligned with the behaviour, outcomes and capabilities. As a result, promotion is just an infrequent reward, and the compensation system is a much more important tool of employees' motivation because it can be adjusted frequently (Lawler, 1986, 1990, 1992). On the contrary, in education, the pay structure of teachers under the current practice is normally fixed and it is difficult for schools to use the compensation system as a tool to motivate teachers, (2) While promotion is a more important factor than the pay structure to motivate teachers, it is relatively inflexible under the current practice. A promoted teacher would assume a management post with assigned administrative responsibilities and increase in salary, successful promotion implies rewards in money, power, prestige and status.

Two major issues concerning promotion discussed in the business management literature also have impact on SMB schools. The first one is the promote-from-within policy (e.g., Conner & Fijerstad, 1979; Morgan, Hall, & Martier, 1979) and the second one is the Peter Principle (Peter & Hull, 1969).

Wong and Wong (2005) therefore suggest schools under SBM to consider either (1) the adoption of a more diversified reward system such as introducing some forms of pay-for-performance system, bonus, flexible benefits, and non-monetary rewards, or (2) creating more promotion ranks, whether permanent or on period- or performance-basis as through necessary and standard hurdles at different stages of development of teachers, as in China and Australia so that overall, teachers will develop a higher job incentive and their performance will also be recognized more easily. It is further suggested that schools should create separate promotion posts with criteria of teaching or administrative performance respectively to deal with the less emphasis and then less motivation on teaching qualities in the more administration-oriented

promotion exercise. Studies across different disciplines and in comparative and contextual perspectives are also recommended.

Conclusion

This chapter has reviewed the recent literature mainly in the sociological perspective on teachers and promotion with reference to the important issues namely, gender issues, promotion criteria, career intentions and teachers' satisfaction. Overall, gender issues have been a consistently strong issue in the literature over a number of decades. The changing characteristics of schools over time as a result of the fluctuations in demand for teachers stimulate further exploration of promotion criteria and careers intentions of teachers. Recently, there has been concern on teachers' satisfaction in relation to the promotion system, and the study of teacher promotion is moving towards a comparative and contextual perspective.

These research suggests that the role of promotion is a complex issue that may be dependent on factors operating at a number of levels. These levels would appear to be:

- Contextual factors These vary from country to country, and culture to culture, and suggest that promotional prospects may be grounded in the broader values within society, for example, attitudes towards women and status accorded to teachers. Other contextual factors relate to the specific demographic changes such as falling birth rates, school closures; policy initiatives such as greater emphasis on testing and accountability; and educational trends operating within the educational systems of different countries – however, some of these, e.g. school-based management and marketisation have also become global phenomena and are relevant across different countries.
- 2. Equality factors These mainly relate to the extent to which equal opportunities for all potential candidates operate in practice as well as in theory. There are questions about the extent to which inequalities can be addressed through legislative approaches (compliance with the law) or whether there is a need for change in values and attitudes that have a deeper root within the traditional values of the society (commitment to the spirit of law). Alongside, long standing concerns about gender equality, it is likely that issues of equality related to race, religion and ethnicity will become increasingly important and this will also challenge the use of informal criteria, such as networking, social contacts, etc.
- 3. Motivational factors The third broad area affecting teacher promotion, suggested by the research evidence is motivational factors and these can be extrinsic or intrinsic. Extrinsic factors can generally be regarded as characteristics of the system or incentives. They include incentives such as rates of pay, and also what demands from the post, status, etc. Intrinsic factors are much more concerned with a teacher's internal values and perceptions, such as personal ambition and vision of the management role. Also perceptions of whether they have a "fair chance" of promotion. In some countries, the increasing difficulty in securing good quality candidates and the reluctance to apply to senior posts may also be evidence that intrinsic factors are overtaking extrinsic factors in teacher's decision-making about applying for posts.

Biographical Note

Ping-Man Wong is Head of the Department of Educational Policy and Administration of The Hong Kong Institute of Education. He was a former secondary school principal and received his PhD from the University of Hong Kong. He leads and co-ordinates leadership training programmes for local and overseas educators from Cambodia, Sri Lanka and Mainland China. His major research interests include school management and leadership, curriculum studies, principals' preparation programmes, career interests and professional development of school teachers.

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Section 6

TEACHERS AND TEACHING IN COMPARATIVE PERSPECTIVE

TEACHERS IN COMPARATIVE PERSPECTIVE

Anthony Clarke

Teachers in Comparative Perspective

The starting point for any considerations of teachers in comparative perspective is a document generated by the International Labour Organization (ILO) and the United Nations Educational, Scientific, and Cultural Organization (UNESCO) titled the *Recommendation Concerning the Status of Teachers* (ILO/UNESCO, 1966). This document is as relevant today as when it was first issued and is a common referent point for current discussions of teachers' work at local, national, or international levels. The document provides definitions, principles, and guidelines relative to teachers' preparation, on-going education, and rights and responsibilities as members of the profession. It is recommended reading for those wishing to understand the parameters that give shape and meaning to any conversation about teachers and teaching in comparative perspective, and is used to define and set the boundaries for the discussion that follows.

The comparative rendering of teachers presented in this chapter draws principally on five reports: Darling-Hammond and Cobb's (1995) *Teacher preparation and professional development in APEC members*; UNESCO's *World Education Report* (UNESCO, 1998); Organization for Economic Co-Operation and Development's *Teachers for Tomorrow's Schools* (OECD, 2001); Siniscalco's (2002) *Statistical Profile of the Teaching Profession*; and UNESCO's *Teachers and Educational Quality: Monitoring Global Needs for 2015* (UNESCO, 2006a). Each of these reports draws, either directly or indirectly, on the ILO/UNESCO (1966) document in grounding their analyses. As with any analysis, such as the one attempted in this chapter, there are many more documents that could be drawn upon (some of which are cited below) and readers interested in pursuing elements of the work presented here will have no trouble in quickly gathering a considerable body of information pertaining to their particular area of interest.

This chapter attempts to develop a global perspective on teachers and presents some distinctive trends in their work by focusing on eight key dimensions, structural and cultural, that give shape to their professional role and status within and across contexts.

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A Teacher for Every Classroom

An educated citizenry relies almost entirely on the ability to place a teacher in front of every classroom, be it physical or virtual, throughout the world. Efforts like Education For All (UNESCO's Jomtein Conference held in 1990), although acted upon in qualitatively different ways and received with mixed reviews, nonetheless has set the tone in recent years for a concerted effort to provide a teacher for every classroom and, by extension, a classroom for every child (especially at the primary level). So, in many ways, an initial measure of the success of imperatives such as Education For All is the degree to which these conditions are met around the world.

These targets present considerable challenges in some regions of the world (UNESCO, 2006b). For example, the demand for new teachers is highest in the developing world which counts for 95% of the world's population (Siniscalco, 2002). The World Education Report (UNESCO, 1998) notes that if you take the 6–14 age group throughout the world as an indicator of the overall demand for teachers at the primary level, then the highest demand for teachers is in sub-Saharan Africa, the Arab States, and South and West Asia. For example, the number of primary age children will increase by 21% in sub-Saharan Africa and 13% in the Arab States and South and West Asia by 2015 (UNESCO, 2006a). This demand is reflected in counties like the Democratic Republic of Congo which is experiencing rapid population growth (Fig. 1.).

In contrast, teacher demand in other regions of the world is declining as population growth rates slow (e.g., the United States) or become negative (e.g., Germany) (see also Fig. 1). Where slow or negative growth rates prevail, newly qualified teachers may wait 3 or 4 years before securing a full-time continuing teaching appointment.

When teacher shortages from different countries are juxtaposed, it is interesting to note that in developing countries, teacher demand is highest in remote rural areas. However, in some developed countries such as the United States, demand is highest in central urban areas, often associated with rapidly growing immigrant populations and associated social challenges (Darling-Hammond & Cobb, 1995).



Fig. 1 Examples of countries with rapid, slowing, or negative population growth rates (Population Reference Bureau, 2006)

Another dimension of teacher supply and demand is related to the concept of "educational burden", that is, the responsibility placed upon the adult population to supply teachers for the school-aged population. The World Education Report (UNESCO, 1998) suggests that this capacity in developing countries is underutilized:

... the percentage of the adult population aged 15–64 who are teachers in the formal education system is smaller in the less developed regions (13 teachers per 1000 adults) than in more developed regions (23 teachers per 1000 adults). ... On a comparative basis therefore, the less developed regions would seem to have a substantial "margin" of adult labour potentially available for expansion of their teaching forces to meet increases in student enrolments. (p. 28)

While speculative, and fraught with the problems associated with attempting to provide professional development for those in the adult population who might become teachers, the considerable difference in the number of teachers per capita between less and more developed countries does little to brighten the possibility of attempting to provide a teacher for every classroom. It should be noted that as the educational burden in more developed countries diminishes (with fewer and fewer children entering the school systems in these countries) there is an increasing trend for new teacher graduates to explore possibilities for teaching in other contexts. For example, in Canada, "prospective teachers are increasingly leaving the province [of British Columbia] to accept positions elsewhere in Canada and the world" (British Columbia College of Teachers, 2003, p. 5).

However, the challenge of providing a teacher for every classroom is still great and in a recent UNESCO release the Assistant Director General for education indicated that current teacher shortages threaten world-wide imperatives such Education For All (UNESCO, 2006b). Further compounding this problem is the devastation wrought by natural and social tragedies. For example in sub-Saharan countries:

An important constraint to the supply of teachers is HIV/AIDS ... the debilitating nature and mortality of the disease lead to the loss of trained teachers. This loss impacts education systems in complex ways, which are often difficult to assess. For example, the virus is prevalent among student teachers and within teacher-training facilities. This reduce the pool of potential teachers (UNESCO, 2006a, p. 25)

Pupil–Teacher Ratios

The pupil/teacher ratios in classrooms around the world, in general, range from 10:1 to 40:1 depending on the grade level and country (Siniscalco, 2002). The pupil/ teacher ratios for developing countries are typically twice that of developed countries. For example, at the primary school level Denmark has a ratio of 11 pupils per teacher, in the United States it is 19, France reports 20, the United Kingdom has 23, in Chile it is 33 pupils, and Zimbabwe has 41 pupils per teacher (Siniscalco, 2002). When one considers the number of school-aged children who are eligible but not currently attending school then the potential ratio in developing countries is higher

still. Some reports from developing countries have the teacher/pupil ratio as high as 79:1 (UNESCO, 2000).

Caps on student numbers in primary classrooms in developed countries ensure lower ratios for classes at that level relative to other levels of schooling. However, as noted above, in developing countries, the trend is in the opposite direction with early primary classrooms experiencing the highest ratios of all classes across school levels. Siniscalco (2002) notes that this situation "is exacerbated by significant numbers of secondary school age youth who are enrolled in primary education as repeaters or late entrants" (p. 8). In countries such as Brazil, Paraguay, the Philippines, and Zimbabwe, it is estimated that up to 50% of pupils of secondary-school age who are enrolled in primary school fall into these two categories (OECD, 2001). Therefore, while an increase in the number of pupils who attend school may be cause for celebration (as a result of initiatives like Education For All), the impact on teachers might be quite the opposite, especially when the teachers are faced with widely diverse ability and vastly different age groupings in their classrooms.

At the secondary school level, the pupil/teacher ratios are more indicative of the numbers of students who have the appropriate academic background for that level of schooling rather than the number of pupils who are eligible to attend simply by dint of their age, as tends to be the case at the primary level. The pupil/teacher ratio at the secondary level varies between countries. Drawing upon the same list of countries used in the primary school example above, Denmark and France have a ratio of 14 pupils per teacher, in Zimbabwe it is 15, the United States and United Kingdom have 16 pupils, and Chile has 29 pupils per teacher. It should be noted that the concept of secondary schooling is almost non-existent in some developing countries with all efforts being concentrated on early primary schooling. For example, in the least developed countries around the world only half of the pupils remain in school after grade 4 with many dropping out between grades 1 and 2 (Siniscalco, 2002).

Gender

The percentage of women in the teaching force continued to rise in all regions of the world even in countries where teaching is mainly a male profession, such as sub-Saharan Africa and in South Asia. However, as girls' access to schools in these regions is much lower, it is not surprising that female participation in the teaching force is considerably lower than in other parts of the world (Sinsicalco, 2002). For example:

While the number of female teachers has increased gradually in India, the proportion remains extremely low in most parts of the country. Almost 90 percent of single-teacher schools – which account for at least 20 percent of all schools – are staffed by men. Furthermore, 72 percent of two-teacher schools have no female teachers (Ramachandran, 2003). (UNESCO, 2003, p. 146)

In general, however, female teachers dominate in primary school settings in many regions of the world and are approaching 50% in secondary school settings (Siniscalco, 2002; UNESCO, 2006a). For example, across the Asia Pacific Economic Cooperation

(APEC) member countries, women make up the bulk of the teaching force at the elementary level (Darling-Hammond & Cobb, 1995). This trend is beginning to emerge in many APEC member secondary schools, with the exception of Japan and the Republic of North Korea where men still dominate the workforce at the secondary level (Darling-Hammond & Cobb, 1995).

In a related statistic, male teachers continue to dominate administrative positions within school systems. For example, in APEC member countries, while women teachers constitute over 50% of the workforce, they occupy less than 20% of the administrative positions (Darling-Hammond & Cobb, 1995). A recent North American report notes that "while the percentage of female administrators is on the rise, the proportion of female administrators still remains below that of female teachers" (Ringel, Gates, Chung, Brown, & Ghosh-Dastidar, 2004, p. 4). A few countries present encouraging signs that a greater balance between male and female administrators is being met. For example, in Scotland female administrators exceed 50% at the primary level and is ~30% at the secondary level (Siniscalco, 2002).

Age

The age of teachers, in general, follows predictable patterns, with teachers in developing countries being much younger (under 30 years of age) compared to those in developed countries. For example in most OECD and EU countries teachers are over 40 years of age on average (Siniscalco, 2002; UNESCO, 1998). The age of the various teacher populations throughout the world has its own attendant issues. Where teacher populations are relatively young, issues of mentorship and guidance come to the fore. For example, in Indonesia, a developing economy, 50% of its teacher population is under the age of 30. Jordan, also a developing economy, has 90% of its teachers under the age of 40 (Siniscalco, 2002). In both instances, the wisdom and knowledge of an experienced teaching force is for the most part unavailable to pre-service and early-career teachers. By contrast, countries with aging teacher populations face different challenges. For example, "more than 60% of all primary teachers are over 40 years of age in Canada, Italy, and the Netherlands" (UNESCO, 2006a, p. 34). A significant challenge for these countries is ensuring that their teachers maintain their motivation, stay abreast of current developments, are forward looking, innovative, and continue to find satisfaction in their work as educators (Dinham, 1995). The age of the teacher population is a significant statistic in any educational context and managing, negotiating, and maintaining a happy balance requires cooperation between teacher education providers, and employer (e.g., Ministries of Education) and employee groups (e.g., teacher unions, associations, or federations).

Teacher Salaries

Teacher salaries, like all other comparisons in this chapter, vary considerably from country to country. For example, mid-career salaries in Brazil, the Czech Republic,

and Indonesia might reach US \$10,000 whereas in Switzerland teachers' salaries are over US \$40,000 (OECD, 2005). In some contexts, the within-country difference in salaries between secondary and elementary teachers is considerable. For example, in the Netherlands and Switzerland "statutory salaries of experienced upper secondary teachers are more than 35 percent higher than those of their counterparts in primary schools, and in Argentina, Brazil, and Malaysia the difference is between 67 per cent and 123 per cent" (Siniscalco, 2002, p. 37).

However, despite various country and school level differences, the World Education Report (UNESCO, 1998) noted a much more general and troubling development: "It is hard to find, for any region of the world, clear evidence of an overall trend towards improvement on teachers' economic status" (p. 41). Only a few countries like Austria, Finland, and Switzerland indicated that the general economic status of teachers "was not a cause for anxiety" (UNESCO, 1998, p. 38). Perhaps more alarmingly, in a minority of other countries teachers can "barely survive on the official salaries (when they are paid at all), have other jobs too, and in many cases have not themselves received an education at a level much higher than the students they are required to teach" (UNESCO, 1998, p. 37). These trends, which continue to endure (UNESCO, 2006a), remain a relevant and pressing concern for the role and status of teachers throughout the world.

In an interesting reversal of the general trend emerging in this chapter between developing and developed countries (where the status of teachers in the latter is more favourable than that in the former), in developing countries teachers' salaries are more favourable, relative to GDP per capita income, than those in developed countries. This difference, highlighted by Darling-Hammond and Cobb (1995) and supported by Sinsicalco (2002), shows that in developed countries teachers' salaries are considerably lower and losing ground compared to those of teachers in developing countries, especially in comparison to other professions that require similar educational qualifications and experience. For example, "teachers in the United States earn 20–30% less than their counterparts in other professions" (Darling-Hammond & Cobb, 1995, p. 12). The only exceptions in Darling-Hammond and Cobb's (1995) report were countries like Chinese Taipei and Japan where teachers' salaries were still competitive with other professions. Not surprisingly, in these two countries teacher shortages are rare.

Finally, the teaching profession and its strong connection to the public service sector has important implications for teachers' financial security. Of particular significance to the current discussion is that "teachers' salaries and allowances constitute the largest single factor in educational expenditure accounting for two thirds or more of public expenditure on education in most countries" (Sinscalco, 2002, p. 36). This statistic, supported by UNESCO's (2006a) *Teachers and Educational Quality* is significant for two reasons. First, as a component of public expenditure, teachers have "a certain amount of protection against loss of economic status relative to other occupations" (UNESCO, 1998, p. 41) as they are protected from market forces that can result in significant fluctuations in the salaries of non-public service sector employees. However, when teachers are embedded in the public service sector, the danger always exists that their status (financial, professional, etc.) is at the whim of the government of the day. For example, recently in Canada, one provincial government legislated teaching to be an essential service thereby making it illegal for teachers

to strike (see www.cbc.ca/canada/story/2005/10/23/teachers-sunday051023.html). Teachers in different countries can find themselves in an even more precarious position when their collective bargaining rights are completely non-existent and they are unable to lobby for improvements (UNESCO, 1998). In short, membership in the public sector service can be a double-edged sword for teachers' financial and professional status.

Teaching and Working Time

Teaching time (i.e., face-to-face classroom teaching), for the most part, is similar between countries (Siniscalco, 2002). However, there are a few instances where the difference is quite distinct. For example, "teachers in Denmark teach for 42 weeks in the year compared with 36 weeks per year in the United States [and] Danish teachers teach for around 3 h per day compared with around 6 h per day in the United States" (OECD, 2005). As a result, Danish teachers teach 40% less than their United States counterparts over the course of a year.

However, working time (i.e., the total time that teachers are expected to be engaged in teaching and non-teaching activities while at school) is considerably more variable. For example:

At the secondary level, the shortest working time is found in Luxemburg, France, Belgium, Ireland, and Germany where full-time teachers are only required to be at school for a specified number of teaching hours. Conversely, the longest working hours are in Denmark, the Netherlands, Austria, and Spain, where the load of formal non-teaching working time is the heaviest at all levels of education (Siniscalco, 2002, p. 30).

Calculations of teaching and working times are typically based on the number of on-site hours expected of full-time teachers. However, sometimes this calculation is difficult when trying to account for part-time teacher participation. This is especially the case in some regions of the world where part-time teachers far out number full-time employees (Siniscalco, 2002). In countries like Argentina and Chile, part-time teachers make up 80% of the teaching population. For example, Chilean teachers often teach at two or even three different schools in the course of a single week and are part-time employees in each school, thus complicating the calculation of teaching and working times in that country. By contrast, part-time teachers in developed countries represent less than a fifth of the teaching population.

In a related observation, the majority of part-time teachers throughout the world are women (Siniscalco, 2002), accounting for, among other things, the increasing feminization of the profession throughout the world at the turn of the twentieth century (Wylie, 2000).

Pre-Service Teacher Education

In those countries experiencing the greatest demand for teachers, the preparation undertaken for teaching tends to be highly differentiated. For example, in developing countries "the majority of primary teachers only have lower secondary qualifications" (Siniscalco, 2002). In countries like Togo and Uganda, up to 50% of the teachers have not received any form of professional training (Siniscalco, 2002).

In developed countries, teachers usually have 3–5 years of post-secondary education including their professional studies that are taken as either a concurrent or consecutive element of their preparation. For example, most OECD countries offer concurrent models with the exception of France that only offers the consecutive model (Siniscalco, 2002).

Pre-service teacher education requirements tend to vary depending on school level. In general, secondary school teachers are often more highly qualified than their primary school counterparts. For example, in countries with substantive teacher preparation programs it is not unusual for primary school teachers to hold a pre-bachelor degree qualification from an accredited "normal" school or college while secondary school teachers are more likely hold a bachelor degree from a university (Darling-Hammond & Cobb, 1995). Notable exceptions are countries like Australia, Canada, Great Britain, and the United States (Siniscalco, 2002) where the academic and professional requirements for teachers are more comparable across school levels. For example, in Canada, a Bachelor of Education degree, in a number of jurisdictions, qualifies the holder to teach from kindergarten to grade 12 (the most senior year of secondary schooling).

Most pre-service teacher education programs have some form of field experience or practice teaching block, often towards the end of the program (UNESCO, 2006b). This experience may range from a few weeks to a full-year internship in countries like Chinese Taipei (Darling Hammond & Cobb, 1995). There is an increasing trend for teacher preparation programs to integrate the field experience across the duration of a program rather than as an end-of-program experience (Darling-Hammond & Cobb, 1995). In some settings, the induction years – the first or second years of teaching – are deliberately linked to the pre-service experience. For example, New Zealand and Japan are two countries which link the two and provide system-wide support for beginning teachers as part of well established induction programs (Darling Hammond & Cobb, 1995).

Registration

For many countries, the completion of some form of teacher preparation constitutes the only requirement to enter the teaching profession, for example, Singapore and the People's Republic of China (Darling-Hammond & Cobb, 1995). However, in a number of other jurisdictions teacher registration is a separate and additional requirement for those wishing to teach. This additional step often falls under the purview of a Ministry of Education, a semi-autonomous regulatory body, or an autonomous governing body of the profession itself (e.g., akin to those in the medical and legal professions). The General Teaching Council in Scotland was the first professional registration body for teachers in any country in the world (established in 1965). The powers of such bodies vary from jurisdiction to jurisdiction and typically include licensure and disciplinary functions (i.e., the ability to discipline a member whose behaviour is found to be unbecoming a member of the profession).

In areas that are experiencing teacher shortages, registration and standard preparation are often waived with alternative entry routes to the profession appearing in an almost an ad hoc fashion (Darling-Hammond & Cobb, 1995). When this situation occurs, the debate of "professional" versus "competency-based" preparation for teachers arises:

There is a fear that non-traditional programmes produce 'deficient' teachers, mainly because these teachers have not been trained for as long or as thoroughly as teachers who are the products of more traditional programmes. The shift in emphasis from certification based on evidence of sufficient mastery of curricula provided in teacher education programmes (the prevailing situation in Europe) to certification based on competences ... is very significant in this respect. Where the focus is taken away from programme content and placed more directly on the type of skills that a competent teacher should possess, it becomes easier to introduce alternative pathways to teacher qualification. (Eurydice, 2002, p. 14)

Accompanying the development of bodies for the regulation of teaching are increasing calls for such bodies to establish professional standards for teachers. While often played out at the local level, the notion of more universal standards for teaching is garnering increasing attention at the national level in a number of jurisdictions. For example, the National Board for the Professional Teaching Standards (NBPTS) in the United States currently has over 50,000 teachers who have qualified for National Board Certification. However, the introduction of professional standards for teachers, although laudable and an important element of any profession, also creates considerable anxiety in some quarters. Reminiscent of some of the same issues that arise around alternative entry routes for the profession, the debate over standards typically turns on two distinctly different ideological approaches. The first is a developmental approach "which can provide structured opportunities for teachers' further professional learning, aimed at improving the quality of teaching" (Mahoney, 2000, p. 31) and the second is a regulatory approach which can be used "as a managerialist tool for measuring the efficiency and effectiveness of systems, institutions and individuals" (Mahoney, 2000, p. 31). When played out in the second context, the use of standards can often:

... obscure the ways in which evaluation process are inescapably mediated through human subjectivity. They emphasize what can be "measured" at the expense of the immeasurable (Broadfoot, 1999), which leads to an over-concentration on the "operational" (Devereus, 1997) and patrols the boundaries of what is to be allowed to count as "quality." (Mahony, 2000, p. 23)

Conclusion

Although the eight dimensions discussed above only partly capture the myriad of issues that underpin the role and status of teachers from society to society, they constitute some of the most important and pressing issues today. To conclude this chapter, I turn to some broader issues that pertain to teachers in comparative perspective.

A central theme of the World Education Report (UNESCO, 1998), repeated again in Teachers and Educational Quality report (UNESCO, 2006a), and captured succinctly at the outset of Siniscalco's (2002) paper is "the interdependence between the status of teachers and the status of education" (p. 1). This link underscores the reality that educational change is both dependent upon and often inextricably linked to the way in which teachers are regarded, supported, and recognized within a society. With the unprecedented pressure today on educational systems to respond to numerous societal demands, such as the promotion of understanding and tolerance (UNESCO, 1998), it is teachers to whom societies most often turn for assistance. This turn has also focused on the financing of schools, teacher management and behaviour, public contracts, production and distribution of textbooks, organization of examinations, accreditation of higher education institutions, private tutoring, and more. Unfortunately, world-wide trends suggest that there is an element of benign, and sometimes deliberate, neglect of teachers as they undertake these endeavours. More often than not, their role and status hinges on the politics encountered in different contexts. The International Institute for Educational Planning (IIEP) is one group who is attempting to address these issues and at its recent Conference (June, 2007) focused on ethics and corruption in education with the aim of assessing the nature and extent of the problem, and identifying good practices and solutions.

It is reasonable to assume that policy choices are one of the most significant factors in determining the role and status of teachers throughout the world. For example, two countries with similar education budgets and similar student populations might have very different expenditure profiles. One country might employ a large number of teachers at relatively low salary levels while another might employ fewer teachers at higher salary levels. In the first instance teachers might seem to be disadvantaged by their low salaries but find that a larger teaching force means that the pupil/teacher ratio in their classrooms is quite favourable. In the second instance, although better paid, a smaller teaching force might mean a much higher pupil/teacher ratio for each classroom. Such trade-offs fall almost entirely within the political realm.

An even more alarming trend seems to be emerging. As more and more countries experience economic difficulties, teachers have become increasingly regarded as "a cost as much as a resource … their position in a majority of countries as the largest single category of public sector employees [means] that they rarely [escape] from the impact of policies of economic restructuring and adjustment" (UNESCO, 1998, p. 17). Unfortunately, the education sector has not managed to "establish a claim for special treatment or exemption from policies designed to control public expenditures" (UNESCO, 1998, p. 18). As fiscal constraints become increasingly evident, tensions such as the public versus private funding of education come to the fore. For example, on average private funding accounts for 19% of education in most OECD countries. However, private funding accounts for "40 percent of the total educational expenditure in Chile, Peru, the Philippines, and Thailand" (OECD, 2001, p. 8). Variability of these sorts between contexts is indicative of the significant role that politics plays in the provision of education throughout the world.

One thing is clear: educational systems are complex systems (Davis & Sumara, 2006) and evolve and emerge in relationship and response to a variety of influences.

Excessive intervention or deliberate neglect constrains the generative possibilities of complex systems to develop and prosper. Entwined within this dynamic are teachers. In 2004, there were more than 54 million primary and secondary teachers in the world (UNESCO, 2006a). The part that they play and the influence they have in the lives of children are extraordinary (even when undertaken in the most disadvan-taged circumstances). This brief synopsis of the role and status of teachers indicates the important learning possibilities and potential that comparative work offers (Alexander, 2001). As noted at the outset, the hope is that the comparisons shared here will encourage others to pursue with vigour and commitment, individually and collectively, areas of particular interest and inquiry.

Biographical Note

Anthony Clarke is a Full Professor in the Department of Curriculum Studies at the University of British Columbia, Vancouver, Canada. He is the Director of the Centre for the Study of Teacher Education and sees his mandate as exploring and promoting the work of teachers and their work across the full spectrum of professional development possibilities. His current research interests include the practicum and self-study in teacher education.

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COMPARATIVE PERSPECTIVES ON TEACHERS, TEACHING AND PROFESSIONALISM

Mark B. Ginsburg and Nagwa M. Megahed

Introduction

In this chapter we organize our discussion of teachers and professionalism around the following questions:

- How, if at all, has the occupation of teaching in various historical and societal contexts been considered to be a *profession*?
- How, if at all, have teachers in various historical and societal contexts experienced *professionalization* and/or *deprofessionalization* or *proletarianization*?
- How have teachers in various historical societal contexts conceived of *professionalism* in relation to teaching and how do these commonsense conceptions relate to broader ideological and structural dimensions of society?

While the first question is mainly addressed by scholars and practitioners subscribing to a functionalist perspective, the second and third questions, respectively, draw more on the writings of those adopting conflict and interpretivist perspectives.

Is Teaching a Profession?

From a functionalist perspective, professionalism is tied directly to the "social fact" that there are professions (prototypically medicine and law) and non-professions (lower status occupations, some of which might be termed "semi-professions") (see Abbott, 1988; Carr-Saunders & Wilson, 1933; Hughes, 1958; Parsons, 1954), and "the words 'profession,' professional,' 'professionalization' are charged with laudatory meanings" (Metzger, 1987, p. 10). Moreover, functionalists generally postulate the following "objective" indicators or traits to differentiate professions from other occupations (including teaching) or to characterize the elements that need to be acquired during the process of professionalization: (a) performing an essential service or task; (b) engaging in (mental vs. manual) work involving a high level of expertise and judgment, thus necessitating extensive pre-service education; (c) functioning based on an ideal of service; (d) operating with autonomy in the workplace; (e) having colleagues (versus nonprofessionals) in

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching*, 539–556. © Springer Science+Business Media LLC 2009 control of selection, training, and advancement in the field; and f) receiving a high level of remuneration (see Becker, 1962; Ben-David, 1962; Etzioni, 1969; Freidson, 2001; Jackson, 1970; Klegon, 1978; Roth, 1974; Vollmer & Mills, 1966; Wilenski, 1964).

Using this framework, social scientists and educators have addressed the question of whether or not teaching is a profession in a variety of societal contexts. Although answers to this question have varied somewhat, studies of the occupation of teaching in *Africa* (Bagunywa, 1975; Nagwu, 1977), *Asia* (Kale, 1970; Koo, 2002; Levine, 1969; White, 1981), *Europe* (Hargreaves, 1980; Helsby, 1995; Hoyle, 1974; Legatt, 1970; Pritchard, 1983), *Latin America* (Alba, 1969; Imaz Gispert & Salinas Alvarez, 1984), *the Middle East* (Mazawi, 1994; Reid, 1974), and *North America* (Darling-Hammond, 1990; Dreeben, 1970; Howsam, 1980; Lieberman, 1956; Lortie, 1975) have generally concluded that teaching cannot be considered as a fully developed profession, but rather as semi-profession or aspiring profession.

Among other conflict theorists, feminists have sought to problematize functionalist accounts of the "traits" of professions (Acker, 1983). For example, Pickle (1990, p. 82) notes that "[w]ith the possible exception of the service ideal, ... professional cultures have been studied largely through a patriarchal lens." Moreover, others have argued that the status, remuneration, and autonomy of teachers in a particular historical period in a given society are inversely related to the degree of the feminization of teaching and the masculinization of school administration (Blackmore, 1993; Ginsburg, 1987b; Schmuck, 1987; Strober & Tyack, 1980).

Professionalization, Deprofessionalization, and Proletarianization

Moving beyond the static question of whether teaching is a profession, we can focus on whether teachers have experienced the dynamics of professionalization, deprofessionalization, and/or proletarianization.

Professionalization of Teaching

Within a functionalist perspective, professionalization is often seen as a universal process, potentially open to all occupations in all contexts, involving the acquisition of "the traits ... [used] to differentiate between professions and other occupations" (Ginsburg, 1997, pp. 133–134). However, conflict theorists tend to view professionalization as "a historically specific process which some occupations have undergone at a particular time, rather than a process which certain occupation may always be expected to undergo because of their essential qualities" (Johnson, 1972, p. 45; see also Halmos, 1973; Hughes, 1966). Rather than being a natural development in the history of occupations, professionalization is seen as a "successful" result of struggle by one occupational group with other occupational groups (Collins, 1979), the state (Fielding & Portwood, 1980), and/or economic elites or capital (Johnson, 1980). Furthermore, the extent to which occupational groups are successful in their professionalization projects depends – to a large extent – on whether they serve the interests of economic

and political elites, both within a particular society and internationally, whether in colonial or neocolonial contexts (Esland, 1980; Illich, 1973; Johnson, 1973; Mac-Donald & Ritzer, 1988).

Many scholars, policy makers and practitioners have promoted the idea that the occupation of teaching is undergoing professionalization and/or should strive to professionalize - that is, to acquire the traits associated with the ideal type profession (see Avis, 1994; Darling-Hammond, 1990; Eggleston, 1986; Engvall, 1997; Gore & Morrison, 2001: Hall & Schultz, 2003: Hargreaves, 2000: Hovle, 1982: Labaree, 1992; McLaughlin, 1997; Reid, 1974). For instance, in France (Meyers, 1976) and Mexico (Alba, 1969; Imaz Gispert & Salinas Alvarez, 1984), teachers were accorded increased status and work autonomy - but not remuneration - as rewards for their serving as front-line soldiers for secular state elites in their struggle with the Church. During World War II teachers' status was enhanced in Germany and Japan. respectively, for "waging spiritual warfare for the fatherland" (Jarausch, 1990, p. 29) and for "carr[ying] out ultranationalist indoctrination" for the military regime (Levine, 1969, p. 148). And in Canada the late 1930s through the 1960s (Filson, 1988), in England after 1926 but particularly from the mid-1940s to the mid-1970s (Ginsburg, Wallace, & Miller, 1988), and in the United States in the mid-1940s (Carlson, 1987) educators experienced professionalization during times of economic expansion and when they were viewed by state elites as key players in defusing and deflecting the impact of radical movements. And using a gendered lens, Blackmore (1995, p. 49) notes the tendency for educational policy makers and managers (the masculinized "hard core") to experience professionalization, while teachers (the feminized "soft edges" of the field of education) experience deprofessionalization.

Deprofessionalization of Teaching

From a Weberian conflict perspective, deprofessionalization is defined as the "loss to professional occupations of their unique qualities, particularly their monopoly over knowledge, public belief in their service ethos, and expectations of work autonomy and authority over clients" (Haug, 1975, p. 197; see also Collins, 1979; Freidson, 1973; Torren, 1973). And, as with professionalization, deprofessionalization occurs as a result of inter-occupational, occupation-state, and occupation-economic elite struggles (Freidson, 2001).

The issue of teachers being deprofessionalized has been addressed by several scholars (e.g., Dove, 1986; Filson, 1988; Grace, 1987; McDaniel, 1979; Race, 2002). For instance, in Vietnam during the French colonial rule (Kelly, 1982); in India during and after British colonialism (Ginsburg, Chaturvedi, Agrawal, & Nora, 1988; Kale, 1970); in China – with different ideological emphases – before, during, and after the Cultural Revolution (Tucker, 1981); in Uruguay during the post-1973 fascist dictatorship (Otero, 1981); and in Hungary before, during, and after the Stalinist regime (Darvas, 1991); political and economic elites sought to restrict teachers' autonomy through training, inspection, and rewards. Moreover, in the 1930s in Germany some teacher groups lost status and were denied the right to organize for higher wages because they publicly protested against the Nazi's fascist and racist project (Jarausch, 1990). Additionally, during the 1970s and 1980s teachers in developing

countries (Dove, 1986), in England (Ozga & Lawn, 1981), and in the United States (Carlson, 1987) experienced deprofessionalization, in the sense of losing autonomy over their work, because various forms of bureaucratic and technical controls were introduced. Finally, during the 1990s in Europe (Esteve, 2000) and Korea (Seth, 2002) teachers were deprofessionalized in the sense of losing social status and respect in the eyes of the public – as the result of government officials' and media criticisms. Nevertheless, it is important to note that at least in England and Finland, during the period from 1994–2001, some primary teachers framed increased government control over curricular and pedagogical roles as increasing their professional status (Webb et al., 2004).

Proletarianization of Teaching

From a Marxist conflict perspective, proletarianization involves the process by which the work of an occupational group – whether such work is considered manual or non-manual and whether such workers are more or less educated – is altered regarding: (1) separating the conception of work tasks from their execution; (2) standardizing and routinizing work tasks; (3) intensifying the demands of work; and (4) reducing the costs (salaries, benefits, training, etc.) of workers (see Aronowitz, 1973; Braverman, 1974; Derber, 1982; Edwards, 1979; Johnson, 1980; Larson, 1980; Mills, 1951; Oppenheimer, 1973). A related concept, "deskilling refers to: (1) the … divorce of planning and doing; (2) the fragmentation of work into meaningless segments; (3) the redistribution of tasks amongst unskilled and semi-skilled labor, associated with labor cheapening; and (4) the transformation of work organization from the craft system to modern Taylorized forms of labor control" (Littler, 1982, p. 125).

Various authors have discussed how teaching and teachers have experienced proletarianization (Apple, 1995; Connell, 1995; Dibona, 1986; Harris, 1982; Jarausch, 1990; Laudner & Yee, 1987; Smyth, 2000). For instance, in Australia (Robertson & Woock, 1991), Canada (Filson, 1988), England (Busswell, 1980; Ginsburg, Wallace, et al., 1988), Mexico (Imaz Gispert & Salinas Alvarez, 1984; Street, 1992), New Zealand (Barrington, 1991; Gordon, 1992), and the United States (Apple, 1983; Ginsburg & Spatig, 1988) during economic and political crises of the 1970s and 1980s the state sought to reduce teachers' work autonomy by instituting various bureaucratic and technical controls as well as to intensify the range and pace of teachers' work. However, at least in the United States, teachers have tended to accept the intensification of their work – a key aspect of proletarianization, which they "misrecognize as a symbol of their increased professionalism" (Apple, 1986, p. 45); that is, "the ideology of professionalism for teachers legitimates and reinforces ... intensification" (Densmore, 1987, p. 149).

Professionalism as Ideology and Teachers' Commonsense Conceptions

While functionalists view professions as a "social fact," conflict theorists claim that "there is no single, truly explanatory trait or characteristic that can join together all

occupations called professions beyond the actual fact of coming to be called profession" (Friedson, 1983, pp. 32–33) and that profession "has no fixed definition or some universal idea irrespective of time or place" (Popkewitz, 1991, p. 2). This is because, professionalism is an ideology or "a mystification which … obscures real social structures," in that even though "the conditions of professionalization" persists (Larson, 1977, p. xviii; see also McKinlay, 1973). That is, rather than considering professionalism "as an actual or idealized description of work conditions," we should consider it "as an ideology that influences people's practice" (Densmore, 1987, p. 134) or as an "an ideological commercial, designed to promote the interests of [an occupation's] members" (Metzger, 1987, p. 12).²

The ideology of professionalism may serve as an occupational group resource in its efforts to a) achieve "professionalization" or b) deflect others' moves to "deprofessionalize" or "proletarianize" the occupation (see Collins, 1979; Dingwall, 1974; Esland, 1980; Freidson, 1994; Gyarmati, 1975; Johnson, 1980; Roth, 1974; Vollmer & Mills, 1966). Several scholars have made this observation in relation to teaching and teachers (e.g., Densmore, 1987; Filson, 1988; Ginsburg, 1987a, 1997; Ozga & Lawn, 1981). According to Lawn (1988, p. 154), the ideology of "[p]rofessionalism is an expression of the struggle over the control and purpose of schooling."

Nevertheless, ideologies, like other resources, can be used by more than one group involved in struggle, that is, they are "two-edged swords" (Ozga & Lawn, 1981). Certainly, administrators within the occupational group's field of practice, other occupational groups, state authorities, economic elites, and other citizens can also employ elements of the ideology of professionalism to challenge teachers' professional claims and aspirations or, more generally, to control teachers' work (see Darling-Hammond, 1990; Fielding & Portwood, 1980; Ginsburg, Wallace, et al., 1988; Lawn, 1988).

Moreover, to be effective, professionalism as an ideology "must ... conform to some degree with what [people] know of social reality from their practical interaction with it" (Eagleton, 1991, p. 14). That is, rather than needing to correspond to "objective reality," effective ideologies merely need to conform to people's commonsense understandings of their experience of that "reality."³ Because of this, "[c]ommon sense [can be] ... the site for the resistance to that ideology" (Simon, 1991, p. 27) as well as a site in which the ideology wins "the 'consent' of the dominated majority ... [though this must] be won continuously" (Apple & Weis, 1983, p. 19).

Thus, we now turn to examine how teachers in various societies conceive of professionalism in relation to their lived experiences as educational workers (Connell, 1985; Lawn & Ozga, 1981) and how their conceptions draw upon and reinforce the "social fact" or "ideology" of professionalism (Wright & Bottery, 1997). That is, from an interpretivist perspective, we discuss teachers' "commonsense knowledge of social structures" and treat them "as phenomena in their own right to be studied in their own terms," rather than imposing theorists' models of profession, (de)professionalization, and proletarianization on the activities of teachers (Dingwall, 1974, p. 331). At the same time, however, we seek to locate such commonsense knowledge in its contemporary and historical political, economic, and ideological context – in order to identify the constraints on and the wider implications of such commonsense understandings.

Studies of Teachers' Conceptions of Professionalism

To illustrate teachers' commonsense conceptions of professionalism, we draw on 6 qualitative interview studies involving a variety of educators in different historical and societal contexts: (a) middle school teachers and head teachers in a Midlands County in England in 1977 (Ginsburg et al., 1980)⁴; (b) teachers and teacher organization officials in Houston, Texas, USA in 1979 (Ginsburg, Khanna, et al., 1988)⁵; (c) pre-service secondary school teachers at the University of Houston, Texas, USA during 1980–1982 (Ginsburg, 1987a)⁶; (d) secondary school teachers in Delhi and Harvana State, India in 1984 (Ginsburg, Chaturvedi, et al., 1988)7; (e) academic and vocational secondary school teachers in Giza, Egypt in 2002–2003 (Megahed, 2004),8 and urban academic secondary school teachers in Hungary in 2004 (Popa, 2007).9 In all of these studies interviewees were asked to explain how they conceived of professionalism and how this conception related to their work and lives as educators. Teachers interviewed in the six studies' articulated commonsense conceptions of professionalism which we organized around three major themes: (1) service ideal versus remuneration as a value of professions, (2) status vis-à-vis other workers/citizens (legitimated partly by higher educational attainment), and (3) power/autonomy in relation to other workers/ citizens (including clients, administrators, and government officials).

Service Ideal and Remuneration

That educators' and others' commonsense conceptions may be linked to an ideology of professionalism (and not to some objective traits that differentiate professions and non-professions) can be seen by looking at contradictions in the categories they employ. One such contradiction pertains to two of what functionalist often include as traits of a profession: an ideal of service and an expectation of a high level of remuneration. Among the teachers interviewed, some of them highlighted a service ideal as a positive part of their commonsense conception of professionalism:

[I consider myself to be a professional] because I enjoy the job. I still feel slightly strange about all this business of these scales and payments and so on. I'm even slightly surprised when my salary check comes in at the end of the month. (English Midlands MS Teacher, NUT Member 2, 1977)

[Professionals have] a real interest in what you do [and] a desire to place the interests and the welfare of the student above your own, in the same way as whatever professional should put the interest of client above one's own interest. (Houston Teacher 7, 1979)

I love being a teacher... [and] am really happy to be a teacher ... The income does not have anything to do with teaching... Of course, my efforts exceed ... my salary, but this is a problem of the state's economy/capacity ... (Egyptian Female Urban Academic Teacher 1, 2002–2003)

I read about [teachers who teach less in class to oblige their students to attend private lessons] in the newspapers. However, these are exceptions. I have my

own professional deontology and I would never deprive my students of knowledge, only to get more money for myself. I know that my colleagues would agree with me. (Romanian Teacher 1, 2004)

In contrast, other teachers interviewed emphasized a high level of remuneration as a positive attribute within their commonsense conceptions of professionalism:

The economic reality has forced teachers to wrestle with the fact that it is less professional to die of hunger than to unite ourselves in a union [to demand higher salaries]. (Houston Local AFT Leader 1, 1979)

You usually think of professionals as getting paid more than the average person, and [teachers] are making less than a waiter. ... [W]hen most unskilled or even uneducated people are making the same kind of money as teachers are making ..., it is terribly unfair. (UH Male Student Teacher, May 1981)

The teaching profession is an exhausting profession which has a limited economic and social status. ... In order for a profession to gain the society's respect, remuneration comes in the first place. (Egyptian Female Rural Academic Teacher 1, 2002–2003)

The ideological nature of professionalism is further evidenced by the fact that the following teachers conceive of remuneration as a *negative* element of professionalism, instead valuing an ideal of service (exemplified, for example, by a *guru* in the Indian context):

I define a profession as something that one devotes time and energy to, and enjoys. ... I think if you are going into it for the money, it wouldn't be a profession; it would be a job. (UH Female Student Teacher, May 1981) [I]n the modern world a teacher is a professional and not a *guru*. He is more materialistic than a guru used to be. ... A guru was ... a selfless person and he imparted his knowledge without expecting material gain. (Indian Rural Male

Teacher 2, 1984)

Professionalism and Occupational Stratification

That commonsense conceptions of professionalism may be linked to an ideology (rather than social fact, defined by a set of objective traits) can be seen in the interviewed teachers' evaluations of the social stratification of occupations associated with dominant notions of what constitutes a profession. Certainly, individuals might differ in their views of which occupations qualify for the status of professions, based on the application of the objective traits/indicators. However, the fact that they disagree on the validity of occupational stratification, draws attention to the ideological nature of professionalism.

Many of the teachers interviewed treated as unproblematic the idea that professionalism is integral to a hierarchical division of labor. Sometimes the idea of occupational status differences was articulated explicitly in relation to professionals having higher levels of formal education and skills:

I would say that yes, that we are professionals, because we have had attended college and we must hold a university degree. In this sense, we are similar to doctors and lawyers ... (Houston Teacher 8, 1979)

Sometimes I feel like a bureaucrat. Everyday I have to fill out paperwork, and this is awfully tedious and so useless. ...I feel that I didn't ... [attend] university just to become a pen pusher. ... I am not arrogant, but there are certainly things that I know how to do better, such ...sharing my knowledge with my students and my colleagues. (Romanian Teacher 2, 2004)

I think that being a professional is having a set of abilities that most people around don't have ... [Otherwise], you're sort of like that guy who digs the ditches ... I think there are some jobs that are not professional ... (UH Female Student Teacher, May 1982)

Trade unions can have unskilled laborers; teachers are educated. (Indian Urban Male Teacher 9, 1984)

Other times these occupational status differences were just asserted – as part of a social class structure, seemingly defined in terms of mental versus manual labor:

It is not professional to be affiliated to a union. I do not want to be part of an organization that maintains relations with plumbers, electricians, and other members of the lower classes. (Houston Teacher 1, 1979)

[Teachers' organizations] are not trade unions because they do not deal with laborers. [They have] as members teachers, who are professionals. (Indian Rural Male Teacher 1, 1984)

Teaching is an exalted profession. It is the profession of messengers ... Students look to the teacher as if s/he is not like ordinary people ... This should be the case... (Egyptian Female Rural Vocational Teacher 2, 2002–2003)

However, other teachers interviewed did not accept the idea of stratifying occupations, whether based on some notion of professionalism or for any other reasons. That the views of these educators on this and other subjects were more in line with the Left (politically and ideologically) in their respective societies should help us to recognize professionalism as ideology (rather than a social fact):

A real question seems to be whether professionalism is a necessary attribute. It may be nothing but an illusion manufactured by those wishing to distinguish themselves from the general mass ... (English MS Midlands Teacher, NUT Member 7, 1977)

I don't like the word profession anyway. ... It's a desperate bid for status [being like accountants and doctors]. I am fairly left-wing in my political views and I don't honestly think professions are important. ... How you do your job is the important thing, not what you call it. (English Midlands MS Teacher, NUT Member 8, 1977)

It's not right to separate certain groups by whether they think or not. How does one determine – and who determines – when someone is thinking? It's like the arm and the brain, how does one weigh one against the other? (UH Male Student Teacher, December 1980)

Professionalism involves dedication to task ... I sense a distinction, a class distinction ... that a professional is better than someone who isn't ... I resent that distinction ... (UH Female Student, July 1982)

Professionalism and Power Relations

As discussed above, the issue of power is included in descriptions about professionalism by both functionalist/trait theorists and conflict theorists. Thus, that interviewees mention autonomy vis-à-vis clients (e.g., parents) as an important element in their commonsense conceptions of professionalism does not tell us whether they are drawing upon a set of traits defining a social fact or whether they are appropriating elements from an ideology:

I think the most important thing [about the "ideal parent"] to me is that they treat ... you as a professional who knows what they are supposed to be doing. ... I ... strongly object about parents coming to tell me how to do my job. (English Midlands MS Teacher, NUT Member 3, 1977)

Teachers ... [should be] saying "what I'm teaching in the classroom is totally right," like the doctor. ... [T]hey shouldn't have to back down [when challenged by a parent or other community member]. Who should question them, but another expert? (UH Female Student Teacher, December 1980)

[In contrast to the respectful manner in which professionals should be treated,] parents come to school and assail teachers ... (Egyptian Rural Male Academic Teacher 1, 2002–2003)

Discipline has disappeared. I feel shocked and very often helpless in dealing with their lack of respect. They wouldn't have dared before... We [were recognized as professionals and] stood above them and their parents. (Romanian Teacher 3, 2004)

However, the ideological nature of professionalism is evidenced when we examine the contradictory ways in which power relations are discussed. On the one hand, professionalism is sometimes associated with legitimate power being exercised by professionals with no or limited interference by state authorities or their managerial staff:

A professional is responsible not only to him/herself, but also to a larger group or organization. Within the limits of one's work, one is free to use one's own techniques, one's own methods to resolve problems. (Houston Teacher 4, 1979) [A]llowing the school board ... to set standards that are used in the classroom, without giving teachers any input into the system, doesn't seem to be working. And ... to

feel as though ... they are professionals, they need to be able to assert themselves as individuals and as teachers ... (UH Female Student Teacher, January 1981)

Teaching is a tough profession and has become unpleasant these days. ... [Like] if a teacher arrives late or misses a class, his/her name will be called on the microphone and there will be a big problem ... (Egyptian Rural Male Vocational Teacher 1, 2002–2003)

As soon as I hear this word [professionalization], my memory keeps bringing other powerful words, nationalization, cooperativization, ... which didn't bring anything good ... The teaching profession is mocked daily by our officials...They forgot what they had promised us, but they don't forget to create more and more specialized agencies, all of them ... meant to control and threaten teachers' work, while adding new meaningless tasks to our job description. (Romanian Teacher 4, 2004)

On the other hand, professionalism can serve as a basis for delegitimating the power of professionals. This seems to be the case in India, where a particular form of the ideology was disseminated by the British during the colonial period (see Ginsburg, Chaturvedi, et al., 1988; Johnson, 1973),¹⁰ but also in the United States, where some administrators appropriate the ideology of professionalism for that purpose:

[Like other professionals,] teachers do not take administrative- and managementtype decisions.... [In contrast, a bureaucrat/manager] exercises discretion in taking decisions that can't be altered or changed. (Indian Urban Female Teacher 3, 1984)

[More like professionals than bureaucrats/managers,] teachers have to follow the set and preplanned curriculum and have to act according to the line of the authorities. I feel like a mental slave in such conditions where a teacher has no freedom... (Indian Rural Male Teacher 3, 1984)

[A]dministrators' definition of a professional is a propped-up dead person. Professionalism is identified with ... not complaining about unsatisfactory conditions ... not rocking the boat, being a good soldier and doing what one is told. (Houston Local AFT Leader 2, 1979)

Conclusion

The focus of this chapter is not only important to scholars but also to educators and other worker-citizens. This is because professionalism is a "key contested term in the history of teaching" (Lawn, 1988, p. 159) and because historically and today "profession," "professionalization," and "professionalism," have punctuated the discourses about reforming teaching, teachers, and teacher education around the world (Barton, Barrett, Whitty, & Furlong, 1994; Furlong, 1992; Ginsburg, 1987b; Gottlieb & Cornbleth, 1989; Herbst, 1989; Yeom, 2005). We have outlined the debates about whether teaching is – or should be – a profession as well as whether teaching as an occupation in various contexts has experienced professionalization, deprofessionalization, and/or proletarianization. We have also explored how

professionalism is reflected in teachers' commonsense understandings of their work and lives, and indicated how such commonsense conceptions relate to what can be understood as the ideology of professionalism. We conclude by suggesting two implications of recognizing the relationship between commonsense and ideological notions of professionalism.

First, when teachers and other occupational groups appropriate (and disseminate) elements of the ideology of professionalism in an unproblematic manner, they "become harnessed to a much wider web of power and control in society" (Esland, 1980, p. 213). That is, even if they are not recognized as members of full professions, they become "technicians of power" (Mills, 1951, p. 4) or "servants of power" (Baritz, 1960, p. 193). Furthermore, by drawing on and reproducing the ideology of professionalism in relation to a meritocratic conception of educational attainment, teachers and other worker-citizens help to legitimate social class inequalities and contribute to reproducing unequal gender relations (Ginsburg, 1987a, 1987b).

Second, although within the ideology of professionalism the interests of employers, clients, the general public, and "professionals" are characterized as identical or at least in harmony (as signaled in the service ideal element), "professional interests are often in conflict with the public interest" (Roth, 1974, p. 22). As George Bernard Shaw observes, professions are engaged in a "conspiracy against the laity." Additionally, Johnson (1972) identifies control over defining *what* a clients needs are and *how* those needs should be met as central to professionals' power and Esland (1980, p. 246) mentions that "the professional mandate … [depends] on a somewhat negative view of the lay public." Therefore, adopting professionalism as a model for educators' activity may lead to a distancing, hierarchical relationship between them and parents as well as other worker-citizens (Pickle, 1990).

Notes

- 1. This is a revision of a keynote address presented at the Fourth International Conference on Comparative Education and Teacher Training, Sofia, Bulgaria, May 1–4, 2006.
- 2. According to Fores and Glover (1978), the ideology of professionalism or what they call "the British disease" – may be particularly relevant to thinking about occupations in English-speaking societies. Similarly, Bledstein (1976, p. ix) argues that in the United States "all intelligent modern persons organize their behavior, both public and private, according to 'the culture of professionalism.""
- 3. Following Gramsci (1971), common sense, or "set of ideas which enables [people] to make sense of their lives[,] is often confused and contradictory, containing ideas absorbed from a variety of sources and from the past" (Simon, 1991, p. 26). Also relevant here is Gramsci's analysis of the relationship between commonsense and hegemony, which can be defined as "a relation, not of domination by means of force, but of consent by means of … political and ideological struggle" (Simon, 1991, p. 22)

- 4. During a period characterized by a "Great Debate" on education as well as major moves to reduce expenditures on education (Ginsburg et al., 1979), semi-structured interviews were conducted with 18 teachers: 3 head teachers, 4 school-level representatives of the National Association of Schoolmasters-Union of Women Teachers (NAS-UWT), 4 school-level representatives of the National Union of Teachers (NUT), and 6 other teachers from our focal schools who we perceived to be active in NUT activities. In the discussion below, we refer to these interviewees as "English Midlands MS Teachers."
- 5. Semi-structured interviews were conducted with 13 primary and secondary school teachers, 9 of whom were enrolled in graduate courses at the University of Houston and 4 were leaders in local teacher organizations 2 with the American Federation of Teachers (AFT) and 2 with the National Education Association (NEA). The interviews probed these educators' conceptions of professionalism in relation to teaching, their views regarding teaching as work, and their degree of involvement in teacher organizations. In the discussion below, we refer to these interviewees as "Houston Teachers."
- 6. As part of a longitudinal ethnographic study, undertaken when politicians and the media began to bemoan the "rising tide of mediocrity" in education in the United States, semi-structured interviews were conducted with sample of students enrolled in the secondary education strand of the Professional Teacher Preparation Program at the University of Houston (see Ginsburg, 1988). In the discussion below, we refer to these interviewees as "UH Student Teachers."
- 7. This study involved semi-structured interviews with 40 secondary school teachers from the city of Delhi (urban) and in Haryana State (rural) in India participated in an interview study. In the discussion below, we refer to these interviewees as "Indian Urban or Rural Teachers."
- 8. In the context of the implementation of a the 1997 reform involving the conversion of 300+ commercial schools to academic secondary schools and government officials continuing criticisms of the practice of private tutoring by teachers, semi-structured interviews were conducted with 40 (academic and vocational) subject teachers in 6 (rural and urban area) secondary schools in Giza, Egypt. During this interview study, which built on a 2001 pilot study undertaken in Cairo, Egypt (Megahed & Ginsburg, 2003), the Arabic phrase *mehnat takhsus* (literally a specialized occupation) was used to refer to the notion of professionalism. In the discussion below, we refer to these interviewees as "Egyptian Urban or Rural, Academic or Vocational Teachers."
- 9. This study involved participant observation and interviews during May–August 2004 with 51 academic secondary school teachers working in the medium-sized city of Râmnicu Vâlcea, Romania. The interviews with the 27 males and 24 females focused on their in-school teaching and their out-of-school private tutoring experiences in relation to their conceptions of themselves and others as professionals, during the pre-1989 "communist" and the post-communist periods. In the discussion below we refer to these interviewees as "Romanian teachers."
- However, it is noteworthy that none of the teachers interviewed in Egypt Cairo (Megahed & Ginsburg 2003) and Giza (Megahed, 2004) – expressed as part of

their commonsense conceptions of professionalism this idea that professionalism means *not* being able to exercise power on the job. This is despite the fact that Egypt was a colony (1882–1922) and a semi-colony (1922–1952) of Britain (see Megahed & Ginsburg, 2006).

Biographical Notes

Mark B. Ginsburg is a teacher education, organizational reform, and evaluation/ research specialist at the Academy for Educational Development (USA). He served on the faculty at the University of Aston in Birmingham (England, 1976–1978) and the University of Houston (Texas, USA, 1978–1987), and from 1987–2004 he was the Director of the Institute for International Studies in Education and Professor of Education at the University of Pittsburgh (Pennsylvania, USA). He has published extensively on topics of teacher education, teachers' work and lives, policy/institution reform, and policy/practice-oriented research and evaluation. His publications include: *Contradictions in Teacher Education and Society* (1988), *Understanding Educational Reform in Global Context* (1991), *The Politics of Educators' Work and Lives* (1995), *The Political Dimension in Teacher Education* (1995), *Cuba in the Special Period: Cuban Perspectives* (1997), and *Limitations and Possibilities of Dialogue among Researchers, Policy Makers, and Practitioners* (2003).

Nagwa M. Megahed is a Lecturer in Social and Philosophical Foundations of Education in Women's College of Arts, Sciences, and Education at Ain Shams University (Cairo, Egypt). She is also a Senior Technical Advisor in the Monitoring and Evaluation division of the Education Reform Program in Egypt. She received her PhD from the Administrative and Policy Studies Department, School of Education, University of Pittsburgh (USA), where she also served as a Graduate Student Researcher in the Institute for International Studies in Education working on projects related to educational reform and teacher education. She has published articles and book chapters, including *Secondary Education Reforms in Egypt: Rectifying Inequality of Educational and Employment Opportunities* (2002), *Stratified Students, Stratified Teachers: Ideologically Informed Perceptions of Educational Reform in Egypt* (2004), *Teacher Education and the Construction of Worker-Citizens in Egypt* (2006), and *Social Inequalities, Educational Attainment, and Teachers in Egypt* (2008).

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TEACHERS AND TEACHING IN EASTERN AND WESTERN SCHOOLS: A CRITICAL REVIEW OF CROSS-CULTURAL COMPARATIVE STUDIES

Yanping Fang and S. Gopinathan

Introduction – Defining the Question and Scope for Review

The nature of teaching in schools in Eastern and Western countries has been a major theme in cross-country comparative studies in education in the past three decades. Interest in such comparative studies emerged in the 1970s after the International Association for the Evaluation of Educational Achievement (IEA) launched the First International Mathematics Study (FIMS) in 1964 (Husen, 1967). This study showed that the US students scored much lower than students in China (Hong Kong), Japan and Korea. Subsequent large-scale quantitative measurements of student achievement, such as IEA's Second IMS in 1980, and the third, TIMSS, in mid-1990, with a science component added, had consistently revealed the same performance gap between the United States (and other Western countries, such as Germany and Britain) and their counterparts in these East Asian Countries. These large quantitative studies had led researchers to conduct smaller scale research involving qualitative approaches, such as interviews and observation of classroom teaching starting from the early 1980s, for instance, research led by Stevenson and his associates that attempted to identify the contextual factors contributing to the achievement gap. In most cross-cultural comparative studies in education, mathematics and science have been the focus not only because they are more measurable subject areas across different educational systems with different instructional languages but also because they are believed to play more important roles in determining the quality of future work forces for national economic development for the twenty-first century. Given the availability of existing research and space limitation, in this brief review, we refer the Eastern countries to those heavily influenced by Confucian Heritage Culture (CHC)¹, such as China, Japan, Korea, Hong Kong, and Singapore and Western countries mainly to the United States, Germany, Britain and France.

Interest in studying classroom teaching and learning has also been driven by the so-called East Asian learner paradox. Observers of East Asian classrooms

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share a common impression – large class size with students sitting in rows of desks facing the teacher and the teacher leading nearly all the classroom activities and doing most of the talking to reticent students (Leung, 1995, p. 301; Paine, 1990, p. 51; Park, 2006). Whole-class instruction instead of group work is used in most of these classrooms. So to Western observers, the teacher in the East Asian classrooms is the "purveyor of authoritarian information" (Stevenson & Stigler, 1992, p. 188) transmitting knowledge to students, the passive recipients, who learn through repetitive practice and rote memorization (Biggs, 1996–1999, p. 46; Huang & Leung, 2004). These settings are in sharp contrast to what is found to be conducive to learning advocated by academics in the West – classroom activities are student-centred; teachers act as facilitators and students actively participate in group work that fosters communicative skills, higher order thinking and collaboration (Biggs, 1996–1999). Yet, in large-scale international tests, students from the former kind of learning environment performed consistently better than students in most Western countries.

Given the task of this chapter and the fact that the literature in the field does, in numerous cases, describe the differences in teaching as Eastern versus Western, we endeavour to go beyond such a dichotomous view of teaching. On the one hand, since there are obvious commonalities across geographically different spaces and often bigger variations within the same region or country, a generalized "Eastern" or "Western" teaching model "is simply too broad to have descriptive validity for the analysis of teaching" (Alexander, 2002, p. 5). On the other hand, the fact that cultural and historical differences have a huge impact on the teaching practices adopted in different countries, even speaking of teaching in the East as a standard activity is misplaced; in a sense there is no such thing as Eastern or Western teaching since countries in the East or the West simply cover so many different cultures, societies, histories that share different values and beliefs (Alexander, 2002; Li, 2003). Differences exist because teaching is deeply embedded in a cultural system and behind key differences in teaching practices lie fundamental differences in the cultural beliefs and values between and among countries in the West and East. Our review also examines such cultural differences wherever necessary.

To organize the review, we choose to view teaching practices as three dynamic interactive phases – the pre-active, the interactive, and the post-active, conceptualized by Philip Jackson (1990). Simply put, they are the planning, teaching, and post teaching activities such as marking student work, a new phase of planning and so on. Our review of the major differences between the teaching practices in Eastern and Western schools is thus along these three phases. Each phase involves key interactive dimensions: for instance, in planning, whether teachers plan lessons individually or with colleagues and what role curriculum materials play in planning; in teaching, what is the nature and types of classroom discourses and how the curriculum materials get used, and classroom activities are structured. After teaching how student homework is marked and used in teaching and how student performance and behavioral conduct is communicated to parents.

Differences in the Pre-Active Planning Phase

In culturally different educational systems the role played by curriculum materials and how teachers use them to plan for classroom teaching differs in important ways. Most East Asian countries rooted in Confucian heritage culture attach great importance to texts. In these countries, textbooks are often written based on carefully developed guidelines and syllabi provided by the ministries of education, thus allowing an alignment with what is covered in teaching and what is tested. In these countries, planning and instruction are closely guided (Cohen & Spillane, 1992). Therefore, these curriculum materials play a significant role in teachers' work and provide opportunities for teachers to develop the knowledge and skills needed to bring about this alignment. In China, official curriculums and the textbooks are treated "as the source of knowledge, and the teacher, as the presenter of that knowledge" (Chen, 1990; Paine, 1990, p. 51; Wang & Paine, 2003). With provision of careful content analysis and teaching suggestions for each topic or unit in the Teaching Reference Materials accompanying each volume of the textbooks, they have been able to serve as "teachers of teachers" for beginning teachers (Paine, Fang, & Wilson, 2003, p. 54). This supremacy of the text is also found to be prevalent in schools in Japan where lessons are often "unambiguously aimed at transmitting to students the knowledge delineated in the textbooks" (Shimahara & Sakai, 1995, p. 205). Therefore, preparing for lessons, particularly for beginning teachers, involves a substantial amount of time spent on studying the prescribed textbooks and teachers' manual both individually and with colleagues. For instance, many teachers in China, like those studied by Ma (1999), attributed their having systemic and deep knowledge of school mathematics to "studying teaching materials² intensively (zuanyan jiaocai) when teaching it" (p. 130). In Singapore, many teachers regard textbooks as a primary source of accurate subject matter and pedagogical knowledge (Fan & Gurcharn, 2000). Even in Hong Kong, a British colony for one and half centuries, textbooks still play a dominant role in the process of teaching (Huang & Leung, 2004).

In contrast, in the United States, teachers, particularly the experienced ones, value their autonomy in choosing curriculum materials and regard control by education officials as a threat to their spontaneity in the classroom and their professional autonomy (Ball & Cohen, 1996; Jackson, 1990). While the Chinese and Japanese teachers rely on the textbooks in planning and teaching, the American teachers, from their learning-to-teach years, are expected to develop their own curriculum and have much greater freedom to select materials to use (Paine, 1990; Shimahara & Sakai, 1995). While American teachers might be able to develop stronger competencies in curriculum design over time (Alexander, 2002), their lack of in-depth study of a given curriculum might have also led to their fragmented understanding of content knowledge, such as in elementary mathematics (Ma, 1999). Market-oriented, filled with rich illustrations and covering many topics without building up interconnections and depth, American textbooks are often written without considering teachers as learners when they use the textbooks (Stevenson & Stigler, 1992, pp. 139-141; see also, Ball & Cohen, 1996; Mullis, Martin et al. 2000, 2005). In many ways, the opportunity to learn from using the official curriculum for teachers in the school systems sharing Confucian Heritage Culture (CHC) is attributed to the widely acknowledged coherent, concise and well-developed textbooks. (Stevenson & Stigler, 1992, pp. 139–141; see also Ma, 1999; Mullis, Martin et al., 2000, 2005).

How well curriculum materials can become tools for teachers in planning and teaching and their effective use also depends on how they are used in the process. Teachers in China and Japan share a long tradition of planning together and observing each other's lessons, fostered by a culture that values collegiality over individualism. Such a culture of collaboration has enabled teachers to pull together good teaching ideas and resources and form multiple perspectives of the teaching materials and students as learners (Stigler & Stevenson, 1991). For instance, Japanese teachers have a long history of doing lesson study - cycles of activities in which teacher groups, usually by grade level, design, implement and improve together one or more research lessons and seek to make positive changes in instructional practice and student learning (Lewis, 2006; Stigler & Hiebert, 1999). Such research lessons are collaboratively and carefully planned and taught by one of the teachers with team members observing lessons and taking careful notes on learning processes (Stevenson & Stigler, 1992, p. 160; see also Lewis & Tsuchida, 1998). As a thriving, on-going form of professional development (Fernandez et al., 2003; Yoshida, 1999), it has generated "shareable knowledge" and the development of schools as organizations where teachers can learn and progress together (Hiebert & Stigler, 2000). It is also believed that lesson study contributed to Japan's shift from "teaching as telling" to "teaching for understanding", especially at the elementary level, from the 1970s to the 1990s (Lewis & Tsuchida, 1998).

In China, team work is institutionalized, such as by traditional school-level Teaching Research Groups and grade-level Lesson Preparation Groups in every school, and opportunities to share in these groups socialize new teachers into "a community that shares a common body of knowledge and speaks a common language" (Paine, 1990, p. 75; Paine, Fang & Wilson, 2003). In China, Japan, and South Korea, teachers teach a relatively light load and sit together in the school common staffrooms by the subject matter or grade level they teach. Such physical arrangements provide them opportunities to learn from other teachers and engage in collective analysis of their daily practice (Fang, Hooghart, Song, & Choi, 2003). The workplace culture promotes "personal and professional support to teachers carrying out complex and demanding jobs" (Paine, 1990, p. 75). It also allows them to refine their craft together and engage in continuous and gradual improvement of planning and teaching. As a consequence, mathematics teachers in China and Japan have a deeper understanding of the content knowledge and produce coherent and well-structured lessons (Ma, 1999; Stigler & Hiebert, 1999).

Individualism, independence and professional autonomy is highly valued in many Western countries. Under individualism, teaching is perceived as an "expression of individual personality" (Lortie, 1975, p. 240) and there is a belief that good teachers are born not made. A full load of teaching duties and "the cellular organization of schools constrain(s) the amount and type of interchange (between colleagues); beginning teachers spend most of their time physically apart from colleagues" (Lortie, 1975, p. 72). US teachers value independence and their decision-making power over schedule, curriculum and classroom management (Alexander, 2002; Stevenson &

Stigler, 1992). Teaching behind closed doors for long hours, teachers do not develop "a common technical vocabulary" (Lortie, 1975, p. 73) to talk about teaching or to know what effective teaching entails (Fernandez, Cannon, & Chokshi, 2003). Therefore, in planning and teaching, "(E)ach teacher must laboriously construct ways of perceiving and interpreting what is significant" (p. 73) and neither do they "have a means of successfully sharing such knowledge with one another" (Stigler & Hiebert, 1999, p. 12). Currently, the United States is attempting to improve the long-standing problem by engaging teachers in collaborative planning and studying student work as part of school reform initiatives (Cobb, McClain, Lamberg, & Dean, 2003; Elmore & Burney, 1999).

Differences in the Interactive Phase of Classroom Teaching

We indicated earlier that in the planning phase, there are remarkable differences between schools in the Eastern and Western countries in the role played by the curriculum materials, organization of teachers' work and continued teacher learning in the workplace. However, as far as the interactive phase of classroom teaching is concerned, such Eastern and Western differences are not so clear-cut at all.

Structure of Teaching Activities and Teacher–Student Interactions

Comparing school teaching between the East and West, the distinction is drawn culturally rather than geographically. Instructional practices bear culturally distinguishable features, such as the differences noted above in planning, designing and using curriculum in Eastern and Western countries. Across CHC countries, the central position of curriculum and text in teaching and culture of collegiality yield highly structured lesson activities when teachers carefully plan their lessons and possess stronger teacher curriculum knowledge. The lesson structures and role of text in the Western countries, such as United States, Britain, and Germany, share key similar features of their own as well (Stigler & Hiebert, 1999). Yet, France and Hong Kong are two cases straddle somewhere between these two Western-Eastern comparison groups.

Paine (1990) observed that teachers in China, regardless of grade level and subject matter, generally began class with a review and inspection of students' knowledge of the text and the previous day's work; they then would present new material directly from the text. After this, they pose questions or exercises for students to "firm up" their knowledge. They end the class by assigning homework (p. 52). The teacher leads or guides the whole class by performing to students in a highly structured way: it starts as the teacher, like a solo musician, walks into the classroom and announces the beginning of the lesson after the bell rings and it ends when the teacher announces "class is over" when the bell rings again and all students stand up saying goodbye to the teacher who then walks out of the classroom. An excellent teacher is one who can

get "the feel of the audience" by reaching the whole class, with his or her "virtuoso performance accomplished through mastery of technical knowledge of the text and the teaching aesthetic" (p. 54).

These rituals and patterned classroom activities are echoed by Stevenson and Stigler (1992) in their studies of elementary classrooms in Beijing, Taipei and Sendai, Japan around the same period of time. Through more than 800 hours of classroom observations in these three cities as well as those in Minneapolis and Chicago, they were struck by the structured and interconnected events used by the teachers towards the same goal in each individual lesson in these East Asian classrooms. To them, these lessons are characterized by "coherence"; like good stories, they share "an introduction, a conclusion, and a consistent theme" (p. 177). In comparison, they found that many of the US math lessons covered more topics in a lesson and the frequent shifts between topics led to a lack of coherence. Even for the lessons with rich activities focusing on one topic, the US teachers often failed to make explicit the connections between the activities. Prolonged and unassisted seatwork and frequent disruptions caused by attending administrative tasks also posed threats to the coherence of the American elementary mathematics lessons.

When comparing secondary mathematics lessons in Beijing, Hong Kong and London in the late 1980s, Leung (1995) found that lessons were structured in Beijing and unstructured in London, with Hong Kong, a mixture of both. He noted that whole-class instruction was common to Beijing and Hong Kong and seat work was more common and much longer in London. During whole-class instruction, teachers in Beijing explained concepts in length to students and those in Hong Kong mostly demonstrated solutions of mathematics problems while teachers in London spent time discussing mathematics with students. Seatwork in Beijing and Hong Kong was about practicing skills just learned and in London, seatwork with occasional assistance from the teachers, could be the major part of lessons since students were often learning different things at different pace during class time. The Beijing lessons were highly on task with no external interruption while those in Hong Kong and London contained "off-task" incidents such as late arrival of teachers and early dismissal of classes to allow students to "pack away". More than half of the London lessons Leung observed also had occasions when the teacher was doing some administrative work while students were not working at all. London teachers were more likely to be seen maintaining discipline than Hong Kong and Beijing teachers. Leung also found that while Beijing teachers seemed thoroughly prepared for their lessons, Hong Kong and London teachers were "making extemporaneous decisions in their teaching either in using examples or in the next step to take" (pp. 301–305).

In their preparatory work aimed at informing the survey design for TIMSS, William Schmidt and a group of researchers from six countries (1996) conducted 120 classroom observations in France, Japan, Norway, Spain, Switzerland, and the US from 1991 to 1993. The observations were aimed at describing the mathematics and science classrooms and identifying key instructional elements. The findings from the available international comparative studies on curriculum and classroom practices, such as role of the textbooks, coherence of lessons and structure of classroom activities, were used to inform the development of a research framework called Characteristic Pedagogical Flow (CPF) to capture CPF cross-nationally. They also drew on the research trend that examined the importance of subject matter and teacher beliefs of subject matter in shaping the organization of classroom activities. The framework examined three key attributes – content representation and complexity, content presentation, and the nature of classroom discourse. Their observations described the characteristic pedagogies in several European countries. However, as discussed later on issues around research methodology, there are limitations in using such observations to help frame large-scale cross-cultural quantitative studies of curriculum and instructional practices, such as TIMSS.

Interestingly, Schmidt and the research group, with researchers from the countries involved in the study (1996), found that among the four European countries, lessons in Norway and Switzerland, very much like those in London, had a large proportion of seatwork in which students could work on different things at different paces. Teachers did not spend much time explaining concepts or topics but questioned students on whether they understood something and used student responses to move the lessons on. Although textbooks and other resource materials were used extensively by both teachers and students, unlike East Asian countries, they were not used for instruction but as a major subject matter resource. Teachers in both countries seemed to "avoid being considered as subject matter experts" (p. 97, 101); instead, they monitored and assisted student seatwork so students were more explicitly involved with the subject matter than teachers. In many ways, mathematics lessons in Norway, Switzerland and London were described as student-centred and unstructured containing many "barely related or indiscernibly-related topics" (p. 97, 101), a pattern also found in the United States by Stevenson and Stigler (1992).

In France and Spain, however, similar to lessons in East Asian classrooms described earlier, "teaching was strongly directed by the teacher" and had "a heavy reliance on teacher expertise" (Schmidt et al., 1996, p. 91) in both mathematics and science lessons. In these two countries the lessons "focused strongly on content and emphasized theoretical justification for mathematical procedures and scientific rules" (p. 91, 99) in which the content was more complex. Similar to the East Asian countries, the instructional language was both precise and formal. In terms of lesson structure, there is also much resemblance. The lessons usually began with review of homework or previous content followed by careful demonstration or exposition of the new material or concepts and development of relationships of the concepts or principles. In the French math classrooms, during exposition, teachers also asked students pointed questions and used a very traditional "elicitation-response-feedback" to develop the topic. Similar to Japan and China, use of the blackboard was "an integral part of the teacher's lesson presentation, particularly in mathematics" (p. 92). Like many East Asian countries, homework was seriously treated and beginning the lessons with review of homework played a role in developing new content. These findings about classrooms in France in both literacy and numeracy were corroborated by Alexander (2000) in his five-country comparative studies on culture and pedagogy. Therefore, there is no typical European classroom teaching given the remarkable differences among the countries compared above.

These studies were able to capture the broader patterns of curriculum and classroom pedagogies, but they are inadequate to pinpoint the real differences of pedagogical elements or their dynamic interactions that give rise to the higher academic achievements of the East Asian students. For instance, Stigler and Hiebert (1999) adopted a similar framework in analyzing TIMSS video study of 8th grade mathematics lessons in Japan, Germany and the United States. The findings they reported in Teaching Gap largely reconfirmed those earlier ones regarding the images of classroom teaching in these countries albeit in finer detail. However, by analyzing a series of lessons taught on the same topic, the video study was able to move beyond to examine variations in Japanese mathematics teaching. Earlier studies described Japanese mathematics classrooms unanimously as a student-centred model of teaching, mostly at the elementary level. Yet, as pointed out by Stigler and Hiebert, at the secondary level, "(t)eacher telling and student memorizing" (p. 48) were also common activities. As they pointed out further, from the view that teaching is a cultural system, these activities are purposeful in leading towards the goal of a lesson - teachers used them to prepare students to learn or perform subsequent activities in the same lesson or upcoming lessons. For instance, the mathematics rules or principles the teacher lectured on and then asked students to recite and memorize were used subsequently in doing a geometry proof problem in the same lesson and a following one.

Beneath the Teaching Discourse – The Puzzle of the East Asian Learner Paradox

As mentioned in the opening section, many Western researchers have been motivated to study classrooms in East Asian schools to unravel the East Asian learner paradox - how students in teacher-dominated and often crowded classrooms could excel in the academic achievements measured in the large scale cross-country comparative studies. Early studies found that teachers in both China (Paine, 1990) and Japan (Lewis, 1995) are expected both to teach knowledge and educate the person, in other words, educating both hearts and minds of children. To do this, love of children and appealing to them with the aesthetic beauty of teaching are emphasized. Yet, in studying mathematics teaching, more fine-grained analysis on classroom discourse and culturally-relevant lenses are needed to make meaning of the teaching and learning that occurs in the classrooms. More recently, researchers, who consider themselves insiders of the teaching systems and culture (Fan et al., 2004), have unravelled some qualitative attributes embedded in the curriculum design (such as teaching problems used) and pedagogy of East Asian classrooms that could help explain how learners acquired their understanding in the teacher-dominated classrooms. They argued that the content and the pedagogies utilized in the classrooms involved different levels and types of variations made by the curriculum designers and teachers. These variations could enable students to discern critical dimensions in the content of learning. This is in line with the observation that mathematics teaching in East Asian countries is coherent, well-structured and focused on content, such as with fewer problems explained around a consistent theme or concept.

Recently researchers of East Asian classrooms used variation theory, an indigenous theory about mathematics teaching developed by Gu (1994) and simultaneously Ference Marton (Marton & Booth, 1997), a Swedish scholar, has led to major findings through analysis of the curriculum, problems used in teaching, and the instructional discourse of the teacher. These more concrete analyses of what such variations could entail and how they lead students to discern the critical aspects of the concept under exploration are reported in the book, *How Chinese learn mathematics: Perspectives from insiders* (2004), edited and written by Fan (based in Singapore) and other mathematics scholars in China and elsewhere.

In the mathematics curriculum materials in China, there are explicit illustrations of how to use variations in designing problems for classroom teaching and student practice. For instance, in the *Teachers' Reference Material* (TRM) (similar to Teachers' Manuals) for 2nd semester, 7th grade (1996) in Shanghai, on the topic of geometric proofs concerning "congruence of triangles", it proposes two typical methods of variation in designing geometry instructional problems and student exercises: "stretching the head" and "stretching the foot" (p. 47). The former is used to diversify a problem to derive more practice opportunities for students by changing the given conditions or the problem context while keeping the same the rest of the problem. The later diversifies a problem by changing between and among what is to be proven and what is given for students to apply and distinguish different uses of a proposition or theorem from varying perspectives. The TRM suggests that using these kinds of practice should reduce the difficulty faced by students in learning geometry proofs (Fang, 2005).

Gu (1994) believed that such variations in teaching problems and student exercises are different ways to manipulate instructional and practice problems in order to enhance their "pedagogical functions or values" (p. 138). He found that majority of the basic exercises in secondary mathematics textbooks and student workbooks in Shanghai could be modified in appropriate ways to serve a greater number of pedagogical purposes. Such modifications would reduce the difficulty in geometric proofs by building a gradual slope of difficulty, dispersing the level of difficulty, and providing "different levels of students with more effective practice and develop their independent thinking ability" (p. 138). Since one major purpose of practice by variation is to facilitate the students in learning the fundamental properties of a math topic, such variations are expected to develop students' ability to understand a fundamental mathematical idea from multiple perspectives. Such variations are not only found in the curriculum and teaching of geometric proofs but also in student workbooks. For experienced mathematics teachers, they often use variations in choosing or designing demonstration problems, explaining the problems, and assigning student homework (Fang, 2005; Gu, Huang, & Marton, 2004; Huang & Leung, 2004).

In teaching, this kind of variation is similar to what Cai (1995) and Hashimoto (1987) identified as "the one-problem-multiple-changes (OPMC) instructional approach" "regularly used in Chinese and Japanese classrooms" (Cai, 1995, p. 23). They attributed the success of current instruction in these countries to this OPMC instructional approach. According to Gu et al. (2004), there are two fundamental uses of variations in classroom teaching leading to students' seeing and experiencing

for discernment. One is varying a set of the integral elements of a concept in the demonstration problems to enable students to "see" them and develop a thorough understanding of the concept (Marton & Booth, 1997; Wong, 2004); the other is creating variations in the instructional procedures to develop basic mathematical skills. In terms of the roles they play for and during instruction, the two types of variation are also called "conceptual variation" and "procedural variation" respectively (Gu, 1994; Gu et al., 2004).

Huang and Leung (2004) conducted detailed comparisons of video-taped mathematics lessons between Hong Kong (from the TIMSS 1999 Video Study) and Shanghai classrooms on the topic of Pythagorean Theorem. Their study illustrated both similarities and differences in using variations in teaching the topic as well as the underlying cultural ramifications. To the authors, "the most impressive findings are the students' active involvement in tackling mathematics content and solving mathematical problems under teachers' skillful guidance in a large class, which is not easy for Westerners to understand ..." (p. 378). They observed that although the lessons in the two cities used different methods in introducing and verifying the theorem, they both demonstrated a strong emphasis on exploring the topic and on instruction and practice with variations that could account for high level student involvement and achievement (p. 368).

In the lessons from both cities, teachers used two different ways to vary the problems for instruction and student practice: explicit and implicit variations. The former refers to observable and concrete variations made in prototype problems in terms of numerical values, orientations of figures and explicit conditions while the later refers to variations made at more abstract and logical level in the prototype problems in terms of changes in parameter, subtle changes of certain conditions, and changes of contexts or solution strategies. They found that Hong Kong teachers tended to use explicit variations to help students experience the critical features of the topic visually and concretely. Shanghai teachers, however, tended to use implicit variations to enable students to discern the critical features of the topic in more abstract ways. The authors associated the tendency to use implicit variations in teaching with a Chinese saying, "remaining essentially the same despite all apparent changes" – a traditional Chinese way of thinking and observing nature and society (Huang & Leung, 2004, p. 371; Wong, 2004, pp. 520-521). In terms of student learning, this means that students master the knowledge and skills through practice with extensive internal variations in the exercises regardless of the change of contexts. As the authors further noted, the differences between the two cities in teaching the same topic imply different cultural impact on teachers' views and beliefs about mathematics and mathematics teaching. Although Hong Kong teachers still share traditional ways of thinking and use variations to engage students, they have been influenced by more recent Western philosophy that learning can be made more meaningful to students if concrete manipulatives or models are used in teaching while Chinese teachers have held a constant belief that students learn critical thinking and logical reasoning through abstract representation (Huang & Leung, 2004, pp. 371, 375).

Rich variations in instruction and practice were also found in Korean mathematics lessons. Park (2006) studied the 7th grade math lessons in three sampled schools in Seoul and he drew attention to one particular kind of variation – a "systematic"

and "continuous" variation leading students to understand the concept. Aimed to help different learners in the classrooms understand a key concept, the teachers were found to start the lessons with a simple basic equation, diagram or situation and made variations in one aspect of the problem at a time. As the instructions went on, they continued to induce variations in other aspects of the problem until the teachers' targeted forms were reached (pp. 158–160). He found such variations not only used in the lessons in all three cities but also in the exercises given to students. Through systematic use of such teacher-initiated variations, students were closely guided to explore the mathematics by experiencing them from different dimensions (p. 161).

Differences in the Post-Active Phase of Continued Teaching Work

Obviously the three phases of teaching - pre-active phase of planning, interactive phase of classroom instruction and the post-interactive phase of continued teaching work are closely interrelated. From a curriculum perspective, it encompasses the intended, enacted, and lived curriculum experienced by students. For instance, designs of variations, such as those illustrated above, exist not only in the official curriculum, the demonstration problems for instruction and student practice given in the official textbooks and student workbooks but also in those selected or designed by teachers. Teachers engage in a cycle of pedagogical reasoning and action that starts with comprehending and transforming the curriculum and ends with comprehending and reflecting on their own pedagogical actions in and outside the classroom (Shulman, 1987). It is only by viewing classroom practices and student learning via such systems thinking (Biggs, 1996–1999, pp. 50–52; Stigler & Hiebert, 1999) that the teacher-dominated large classroom of active student involvement can be understood. As Biggs argued, "the fact that CHC classrooms produce outcomes that compare as well or better than those in the West, and that they are stable, suggests that a working equilibrium has indeed been struck" (p. 53).

From the systems view, culture shapes and is shaped by the organization of teaching and roles of teaching tools and ways of knowledge building. Take homework and how it is used in teaching and learning as an example to illustrate this interrelationship in different education systems. As discussed earlier, Schmidt et al. (1996) found that homework in the well-structured math classrooms in France was not only used for students to consolidate learning but to inform teachers on their teaching and student learning. Therefore, errors in student work were also used as part of teaching and learning in France. When a student error is openly criticized and explained by a teacher, it "is not frowned upon in France as it would probably be in England" and thus a teacher in England would "typically go to enormous lengths to protect children" from "lowering of self-esteem" (Broadfoot, 2003, p. 124). So in British and US classrooms, errors are not typically used in teaching and homework is treated mainly as a disciplinary tool (Leinhardt, 1990) and to complete it is a student's own responsibility. Therefore, Schmidt et al. (1996) found that the US teachers' use of homework was little related to formal teaching or getting information about student learning; it was largely about checking for how many students gave the correct answers and making sure students had completed it.

Homework use in China, however, is an institutionalized tool to connect teaching and learning, work of teachers and students. Traditionally marking student work and explaining errors and tutoring students on their homework have remained part of teachers' expected teaching work. Fang's (2005) case study of an experienced 8th grade math teacher and her colleagues in a middle school in Shanghai showed that they taught 2–3 periods of 40-minute lessons per day and spent the non-teaching hours marking student work, talking with colleagues about problems they encountered during marking, tutoring individual students on their homework to inform their teaching.

One could argue that such a way of using homework and how variations have been attempted as an instructional practice as well as the common expository style of teaching all result from the examination culture in East Asian countries. Huang and Leung (2004, p. 371) pointed out that the long tradition of examination culture might explain the importance of practice and its role in mathematics teaching. In order to avoid repetition of questions used in the test papers, teachers and test makers have to do their best to design questions with variations for teaching a concept and practice to consolidate student learning. On the one hand, the examination culture in East Asian countries has created a closely coupled system (Cohen, 1987) in which teachers and schools are highly accountable for student achievement. On the other hand, the examination-driven system does add pressure for teachers and stress to students who are under the burden of numerous repetitions and memorizations.

Conclusion

In conclusion, via this brief review, we highlight three major findings. First, viewed broadly, big differences do exist between East Asian countries influenced by Confucian Heritage culture (CHC) and quite a number of Western countries in terms of the role of the curriculum in planning, teaching and post-teaching activities, the structure of classroom activities, and teacher-student interaction. Yet such differences cannot overshadow nuances in the cases of similarities (such as France and Spain's emphasis on content and their highly structured mathematics teaching) as well as cases of within culture differences (such as Hong Kong with both CHC and Western influence on its classroom teaching). Second, culture does play a huge role in explaining such differences as well as similarities. The importance of conformity to "text" in the CHC countries and screening and promotion through examinations have organized the work of teachers around studying the text, carefully explaining it, crafting variations for students to practice and monitoring students closely to ensure that they get it right. To cope, teachers hold each other accountable by collectively examining their practice and student learning⁴. In Western schools, however, under the ethos of independence and individualism, more visible in the Unites States, Germany and Britain, teaching is an expression of individual style and classroom activities are more for students to explore with less teacher explanation. Although the differences are not clear-cut between teaching in the Asian schools and Western schools, the

CHC teaching with variations does stand out on its own. Third, the research framework guiding large-scale international studies on education cannot reveal the curriculum and pedagogical elements that lead to differences in student performances. More fine-grained discourse analysis and a systematic view of teaching is needed to better able to explain student success with the content of learning.

One should also be aware that current research that compares teaching in Eastern and Western schools has focused largely on mathematics and science, except for the monumental work of Alexander (2000) who compared the literacy and numeracy practices of five countries (France, Indian, Russian, England and America/Michigan) by conducting both macro- and micro-level analyses. What would the picture of teaching be like if the subject of teaching is a native language or social studies? Meanwhile, culture does have an impact on teaching; yet, most of the literature on teaching in the East focus primarily on countries sharing a Confucian heritage and an examination culture; for other countries in the East sharing different heritage cultures, such as Thailand, a Buddhist country or Malaysia, an Islamic one, we have little data. How would the pattern appear if data were available? With that said, through East-West comparisons, we do provide opportunities to learn from each other in improving schooling and student learning. For instance, while education reformers in the West are paying more attention to content or deepening the content, the East is looking at how to involve students more actively in teaching and learning and how to relate leaning to the real world situations. With globalization, different countries have come to a consensus as to what knowledge and skills should be taught in schools (such as critical thinking, learning how to learn) and how they should be taught (such as group work and project work) (Tatto, 2007). It remains to be seen if globalization will also lead to shared pedagogies.

Biographical Notes

Yanping Fang is an assistant professor at the Centre for Research in Pedagogy and Practice (CRPP), National Institute of Education, Nanyang Technological University, Singapore. She received her PhD in Curriculum, Teaching and Education Policy at College of Education, Michigan State University. Her research has been focused on teacher learning and teacher development from international comparative perspectives. At CRPP, she's principal investigator of several intervention and research projects including piloting and sustaining lesson study in Singapore and mathematical problem solving in Singapore Classrooms with a current component to develop web-based video cases for professional learning of mathematics teachers. Besides research, she is also teaching masters and doctoral level courses and supervising students at both levels.

S. Gopinathan is currently Head of the Centre for Research in Pedagogy and Practice at Singapore's National Institute of Education. In a career spanning over three decades, he has been involved in teacher education in Singapore and has served on numerous Ministry of Education review committees. He has served as a consultant to the World Bank, UNESCO, the Commonwealth of Learning. He has written

and lectured extensively on education reform, language in education issues, higher education and in teacher education. His papers and edited volumes are key references for students of education in Singapore and comparative education internationally. He is founding editor of the *Singapore Journal of Education* and currently co-edits the *Asia Pacific Journal of Education*.

Notes

- 1. Wong (2004) distinguished between Confucian heritage culture which dates back to Confucius' days and the examination culture which started to prosper in the Ming Dynasty as a screening tool for positions in the bureaucracy. Wong believed that in explaining excellent academic results of CHC students, the "examination culture" has a greater impact on achievement orientation than Confucianism.
- 2. In China, the teaching materials used by teachers studied by Ma (1999) and Paine, Fang & Wilson (2003) include National Curriculum Outline that spells out goals of mathematics education and standards and hours of teaching for major topics by grade levels. The Teacher Reference Material (written for teachers only) of each textbook volume provides content analysis by units and lessons, comparisons of major changes between the older and current version of the topic, analysis of student learning difficulties and teaching suggestions. Teachers and students use the same textbooks and student workbooks are closely aligned with daily teaching which are assigned as homework after teaching, collected after students' completion on the following day and marked immediately by teachers as part of teachers' daily work.
- 3. For instance, Paine, Fang & Wilson (2003) found that mathematics teachers in Shanghai shared planning and teaching ideas frequently in terms of what constitutes the "important, difficult- and hinge points" of teaching a topic, concept or a chapter.
- 4. Singapore's mathematics classroom teaching is also heavily guided by a centralized curriculum and textbooks and is teacher-dominated (according to findings from studies done recently by Centre of Research on Pedagogies and Practices, National Institute of Education, Singapore). Yet, its colonial history under Britain and recent influence by the United States have had clear bearing on how teachers' work is organized. Teachers sit in their common staffroom, yet their heavy load of teaching deprives them of opportunities to develop collegiality as workplace resources for learning. Current reform aims to build up teacher collaboration in examining their teaching practice.

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TEACHERS AND TEACHING IN AFRICA

Lawrence Chi Awasom

Introduction

Teaching is the process of giving someone systematic instruction on the appropriate knowledge, values, habits, attitudes and behavioral patterns that he or she needs to function as a useful and acceptable member of the community. Teaching is a cultural universal or one of those things all humans share in common. Through teaching, human beings are able to transfer a posteriori knowledge, as opposed to a priori knowledge, onto their offspring, thus, helping them to adapt better to their environment and to enjoy life to the fullest. Teaching is a big part of everyone's life experience. From birth to death, we spend most of our time either receiving instructions from others, or giving instructions to others.

This analysis is an evolutionary account of teaching and education in Africa from pre-colonial times, through the colonial period, to the contemporary era. It focuses on teaching and education from primary to high school level, or from level K-1 to level K-12. It represents a synthesis of the works of outstanding scientists with respect to the state of teaching and education in Africa across the ages. The analysis makes many recommendations for the improvement of African teaching and education, most of which are addressed particularly to the classroom teacher, generally considered the first steward of education. The exposition examines teaching and education in Africa, (b) The state of colonial or Western European teaching and education in Africa, (c) The state of post-colonial or contemporary teaching and education in Africa, (d) General recommendations for the improvement of teaching and education in contemporary Africa, and (e) General conclusion.

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The State of Pre-Colonial African Teaching and Education

Purpose

In pre-colonial Africa, the main purpose of education was to prepare the young to be useful and acceptable members of the traditional African community rather than to prepare them to be useful and acceptable members of the global community. Such an objective of teaching made sense at a time when traditional African societies were independent, self sufficient and technologically and commercially detached from societies in other parts of the world. Education was considered a means to an end, and not an end in itself. Its immediate objective was to induct African youths into traditional African societies and prepare them for adulthood.

Goals

According to Fafunwa (1974) the seven "cardinal goals" of traditional African pre-colonial teaching/education were as follows: "(1) to develop the child's latent physical skills; (2) to develop character; (3) to inculcate respect for elders and those in positions of authority; (4) to develop intellectual skills; (5) to acquire specific vocational training and a healthy attitude toward honest labor; (6) to develop a sense of belonging and to participate actively in family and community affairs; and (7) to understand, appreciate and promote the cultural heritage of the community at large." Taken together, the above-mentioned cardinal goals of teaching constitute an inventory of the characteristics of the "good person" for traditional African societies, but not for industrial or westernized societies. According to Fafunwa (1974), such an individual was a person who was honest, respectable, skilled, and cooperative with the social order of his day.

Characteristics

Traditional African Pre-Colonial Teaching and Education Were Integrated, Holistic and Not Compartmentalized

Traditional African teaching and education were not rigidly compartmentalized, as is the case with contemporary western education in Africa. Rather, traditional African teaching and education, in their original and widest context, were a continuous flexible process that accommodated both the young and old at any given stage. The aim, contents, and methods of traditional African teaching and education were inextricably integrated or interwoven; and not divided into separate courses, classrooms, and school levels as is the case with contemporary western education in Africa. Abdou Moumouni, in *Education in Africa* (1968a), summarized the integrated and holistic nature of traditional African education as follows: "(1) The great importance attached to it, and its collective and social nature, (2) It's intimate

tie with social life, both in the material and spiritual sense, (3) It's multivalent character, both in terms of its goals and the means employed, and (4) It's gradual and progressive achievements, in conformity with the successive stages of physical, emotional and mental development of the child." It is important to note here that today, some educators are beginning to mimic or revamp the integrated and non-compartmentalized module of traditional African education by using expressions such as "colleges and universities without walls," "schools without classrooms," and "courses without grades."

Traditional African Pre-Colonial Teaching and Education Were Administered from a Collectivist or Corporate Perspective

In pre-colonial traditional African education there were no full-time teachers, no academic certificates, no formal structured schools and no classrooms. The role of a teacher was determined more by his age and experience than by his academic qualifications. Every older member of the community served as a teacher to every younger member of the community. This means that it took almost the entire village to educate a child because every adult member of the community contributed in the educational upbringing of the young. The young were taught by adults in homes, in market places, in palaces, on the farms, at local festivals and at ceremonial rituals. Children were taught by making them to participate in and imitate what adults did on a daily basis. Thus, we can say that traditional African teaching and education were characterized by participation, demonstration and imitation. Children shared and imitated adults in economic activities such as: farming, fishing, weaving, cooking, carving, and knitting, and so on. They also participated and imitated adults in recreational activities such as wrestling, racing, and acrobatic displays. In addition, children were invited by adults to listen to discourse on local histories, legends, the environment (especially local geography, plants and animals), poetry, stories, riddles and proverbs. Lastly, adults taught children how to speak, draw, sing, drum, dance, cook, cure the sick, do farm work, and embrace future roles of administrators, leaders, husbands and wives.

Traditional African Pre-Colonial Teaching and Education Emphasized Respect of the Elderly and Age Group Members

Writing about traditional teaching and education among the Tiriki of Kenya, Basil Davidson (1969, p. 85) indicated that:

There is inculcated a sense of respect for elders, of brotherhood among members of the age set in question, and of skill in practical matters such as the use of arms. The parallel may be wildly remote in context and content, but one is irresistibly reminded of the English public schools. Even visiting Tiriki mums are said to be like their English counterparts, alarmed for their offspring but jealously proud of their progress.

Traditional African Pre-Colonial Teaching and Education Emphasized Outdoor, Teamwork, Initiation Ceremonies

A wide variety of initiation rites and rites of passage involving complex traditional ceremonies formed the climax of traditional African teaching and education for the African youth. A rite of passage was a dynamic social ceremony that marked the transition of a youth from childhood to adulthood. An example of such a rite of passage was the Poro of Liberia that is still an important rite among the Kpelle today (Bonvillain, 2006). During the Poro, boys were initiated into the men's secret society by subjecting them to circumcision and scarifications. Poro initiations occurred sporadically, perhaps once every 10 or 15 years. During the Poro young boys were brought from their communities to an isolated bush area for about 4 years, where they were taught the knowledge and skills that they needed to function productively in Kpelle society. Such knowledge and skills included: farming techniques, house building skills, craft production, fighting and administrative skills, song, dance and traditional histories. They were also taught how to behave appropriately and how to relate positively to elders and chiefs.

Kpelle tradition reinforced the importance of the above-mentioned educational values and skills by subjecting initiates to rigorous physical activities such as circumcision, beatings, scarifications, and verbal harassments. Prominent scars and cuts formed by lashing on initiates' backs and chests constituted the visible symbols of adult status. Such scars and cuts were considered the teeth of the great mythical spirit responsible for the transformation of children from youths into adults. According to Kpelle beliefs, a youth first experienced death when he entered the initiation camp, and then became reborn when the great mythical spiritual figure disgorged him. After he was disgorged, he received a new name signifying his new status, and thereafter his childhood name varnished and was never mentioned again.

All the boys who went through the same initiation ceremony formed strong emotional social and bonds with one another. They learned to identify and empathize with the behavior and needs of people in their own age cohort with whom they suffered isolation, seclusion, torture and transformation. Similarly, they developed strong bonds of mutual assistance, interdependence and loyalty that lasted throughout their entire lives.

Basil Davidson (1969, pp. 84–85), described age set initiation ceremonies and rituals among the Tiriki of Kenya as follows: "Until you are ten or so you are counted as a 'small boy' with minimal social duties such as herding the cattle. Then, you will expect, with some trepidation, to undergo initiation to manhood by a process of schooling which lasts about six months and is punctuated by ritual 'examinations.' Selected groups of boys are entered for this schooling once every four or five years. ... All the initiates of a hut eat, sleep, sing, dance, bathe, do handicrafts together, ... but only when commanded to do so by their counselor, who will be a man under about twenty five. ... circumcision gives it a ritual embodiment within the first month or so, after which social training continues as before until the schooling period is complete. Then some ceremonies at which elders teach and exhort, the accent now being on obedience to rules which have been learned.

The Tiriki social charter is thus explained and then enshrined at the center of the man's life."

Traditional African Teaching and Education Emphasized Secrecy, Honesty, and Gender-Based Teaching and Learning

Camara Laye (1954), in his autobiographic novel entitled *The Dark Child*, wrote about his circumcision experiences and the lessons he was taught in Guinea, West Africa, as follows: "The teaching we received in the bush, far from all prying eyes, had nothing very mysterious about it; nothing, I think, that was not fit for ears other than our own. These lesson, the same as had been taught to all who preceded us, confined themselves to outlining what a man's conduct should be: we were to be absolutely straightforward, to cultivate all the virtues that go to make an honest man, to fulfill our duties toward God, toward our parents, our superiors and our neighbors. We must tell nothing of what we learned, either to women or to the uninitiated; neither were we to reveal any of the secret rights of circumcision. That is the custom. Women, too, are not allowed to tell anything about the rites of excision."

Traditional African Pre-Colonial Teaching and Education Were Folkloric in Nature

Edwin Smith (1940) highlighted the use of folk stories or tales as an important teaching device that was used in traditional African education. Stories were used not only to amuse and express feelings, but also to teach appropriate forms of behavior and morality. Children learned by listening to their elders, and by imitating and "emulating" them. These stories were usually handed down from one generation to the next; their main concern being to induct the youth into the moral, philosophical and cultural values of the community. West African traditional societies had griots or walking historian that memorized the histories and legends of different tribes and recited them publicly to apprentices and audiences. This suggests that direct or formal teaching was also practiced in traditional African education.

Traditional African Teaching and Education Took Place in Isolated Bush Settings

Watkins (1943), drawing from the Poro, described traditional African education and teaching as the "bush school," since the Poro and Bondo societies conducted the teaching of their boys and girls respectively outside the village. Watkins, more than other scholars, greatly emphasized the use of age group teaching in traditional African education. Since age group instruction prepared the youths for military, family, agricultural and cultural duties, each youth in the tribe was expected to attend age group training before he could be considered a worthy member of society. The length of the training differed from tribe to tribe, but it certainly took several years before a boy passed from adolescence into adulthood.

Traditional African Teaching and Education Were Proverbial in Nature

Boating (1983), cited in Asante and Asante (1990), underscored the importance of the use of proverbs in traditional African instruction. Boating (1983) wrote as follows: "Another means by which traditional education promoted intergenerational communication was through proverbial sayings. Proverbial sayings are widespread throughout traditional Africa, and their themes bear strong similarity to one another. The educative and communicative power of proverbs in traditional Africa lies in their use as validators of traditional procedures and beliefs. Children are raised to believe strongly that proverbial sayings have been laid down and their validity tested by their forefathers."

Fajana, cited in Joseph Okpaku and others (1986) also emphasized the importance of proverbial teaching in traditional African education, indicating that proverbs constituted an important intellectual mode of communication, served to develop the child's reasoning power and skills, and expressed the deeper thoughts that were most essential in settling disputes and making major decisions. "They had to be mastered if the child was to be fully developed and be able to cope with the various occasions when they had to be used" (Fajana, in Okpaku et al., 1986). Borland (1969) expressed that "Tsuma [proverbs] embodied the wisdom and experience of a people lacking written records in a concise, quotable and often amusing form. The free use of Tsumo was an acceptable way of winning an argument, and Tsumo were therefore an integral part of Shona legal procedure which was conducted by argument."

Traditional African Teaching and Education Were Moralistic in Nature

Fafunwa (1974), discussing the education of the Yoruba, stressed the importance of moral rectitude or good character formation in traditional African education by stating that it was the "corner-stone of African education." Moumouni (1968b) supported Fafunwa by writing that molding character and providing moral qualities were primary objectives in traditional African teaching and education. Moumouni indicated that almost all the different aspects of education of the child and adolescent aimed toward this goal, to a greater or lesser degree. Sociability, integrity, honesty, courage, solidarity, endurance, ethics, and (above all) honor were, among others, the moral qualities, that were constantly demanded, examined, judged and sanctioned.

Traditional African Teaching and Education Spanned an Individual's Entire Life

Ociti (1973) opposed writers who maintain the view that "... since [precolonial] Africans knew no reading and writing, they therefore had no systems of education and so no contents and methods to pass on to the young." He maintained that scholars who feel old Africa was a tabla rasa with no educational institutions and processes are people for whom "... education ... means western civilization; take away western

civilization, and you have no education." For Ociti (1973), the latter is contrary thinking, for there were indeed valid indigenous educational systems that existed in Africa.

Ociti (1973) expressed that the educational systems that existed in Africa prior to western Euro-American thought spanned the entire life of the African child. The education of the African child started as soon as the child was born. During infancy or the early years of childhood, the main agents of education were his biological parents and close family members. At this time the child was generally taught by his close family members, basic linguistic skills, his environment, and how to play. Family members also taught the African child to know, internalize, and practice appropriate roles not only for his community, but also for his sex and age. As the child grew older (middle/later childhood and pre-adolescence) the main agents of education in his life were his age-group members and the larger society as a whole – these featured very significantly during the circumcision rite of passage in late adolescence. The circumcision rite of passage was characterized by orature, myths, legends, proverbs, folktales, song and dance, discipline and courage, all activities that effectively transformed the child from a youth to an adult.

According to Ociti (1973) "before the advent of the Europeans, African indigenous education ... was quite adequate in so far as it met the requirements of the society at that time ... [And] like any good system of education, it had its objectives, scope and methods which clearly reflected the ways of life or cultural patterns of the clan or chieftain."

Traditional African Teaching and Education Resulted to Mastery Learning and Education

Watkins (1943) described traditional African age group training as "Mastery learning" because it had little or no chance of failure. In it, every effort was made (including intensive counseling and incentives) to insure that all children, including even the most cowardice youths, were determined to succeed, and to withstand the pain of the circumcision ritual. Age group instruction, assignments, apprenticeship, and experience of particular significant events were the most common method employed to instruct the young. Age group instruction was strengthened by private instruction from trusted family members such as mothers, fathers, brothers, sisters, uncles and aunts. Other methods of instruction and education included: repetition, imitation, internalization and hands on experience. The result was that by the time the African youth reached adulthood, he or she was a full integrated member of the community into which he or she was born.

Traditional African Teaching and Education Were Effective Education

Felix Boating (1983) wrote that traditional African systems of teaching and education were and are still so effective that their "... total rejection ... will leave African societies in a vacuum that can only be filled with confusion, loss of identity, and a total break in intergenerational communication." Boating (1983) wrote that "the essential goal of traditional education is still very admirable and challenging."

Limitations

However, traditional African pre-colonial teaching and education, like teaching and education in other societies today, had their own weaknesses, as follows.

They Were Ineffective as Instrument of Change, Uniqueness and Creativity

Tribal African teaching and education were for conformity, and not for change, individuality, uniqueness and creativity. They taught strict obedience to the elders' authority and rules, which sometimes were not always well-founded, with the result that when the missionaries brought their schools to Africa, they became a refuge for those Africans who wanted to be different from other members of the tribal group (Achebe, 1958). Traditional African teaching and education operated under the philosophy that human nature is constant and without any revolution to upset the status quo or old order (Ociti, 1973). However, to the greatest amazement of many Africans, western schools in Africa served as places where Africans were anxious to go to earn diplomas and degrees, and therefore social prestige, fine clothes, cars, houses, including economic and political power.

They Were Exclusive of People Outside the Continent of Africa Who Did Not Belong to African Tribal Social Settings

The tribal nature of traditional African teaching and education sometimes prevented social integration and reforms between members of different tribes, and resulted into inter-group wars. According to Cyprian Ekwensi (1966), tribal teaching and education educated men to be men and women to be women. Gender distinction functioned well "... at a time when a man was a man and women were won by those who deserved them ...," but in the context of modern Africa, when all human resources must be rapidly mobilized for political and technical development, African traditional systems of teaching and education fail immensely.

They Failed to Produce Large Armies With Scientific Weapons to Defend Their Autonomy

Traditional African education did not produce scientists who could initiate social changes, neither did it produce great military armies that could counter the onslaughts of powerful invading colonialist groups. Examples of the latter colonialist groups included: the British, French, Germans, and other Europeans.

Critique

Because the standards and objectives of indigenous African teaching and education failed to conform with the colonialist and assimilationist expectations of western

systems of teaching and education, some less well-informed scholars have expressed that pre-colonial African teaching and education were primitive, savage and barbaric. According to Babs Fafunwa (1974) such contentions should be seen as the product of ignorance due to a total misunderstanding of the value of informal African teaching and education. Traditional African teaching and education must be judged, not from the perspective of extraneous or foreign considerations, but from the perspective of their social context or the ways in which they satisfy the needs of Africans. "After all, education is the aggregate of all the processes by which a child or young adult develops the abilities, attitudes or other forms of behavior which are of positive value to the society in which he lives; that is to say, it is a process of transmitting culture in terms of continuity and growth and for disseminating knowledge either to ensure social control or to guarantee rational direction of the society or both. All educational systems, whether traditional or Western-oriented, seek to achieve these goals irrespective of the curriculum, methods and organization designed for the purpose" (Fafunwa & Aisiku, 1982). It is important to note here that traditional African teaching and Education are, today, still very much a part of many traditional African villages.

The State of Colonial or Western European Teaching and Education in Africa

General Characteristics

The twentieth century witnessed a vast exploration of Africa by European powers, including evangelistic and trading activities, all of which reached a climax in the scramble and partition of Africa in 1884 and the establishment of European colonial rule over large portions of the continent. Among the principal "winners" in the scramble and partition were Britain and France. During the first years of colonial rule, foreign missions (mainly Christian or Islamic missions) controlled teaching and education. Initially, their central mission or objective was apparently to propagate the gospel and win the souls of Africans for Christ. These missionaries taught religion side by side with a narrow curriculum of reading, writing and arithmetic. As time went on, European colonial governments showed interest in teaching and education; they formed administrative partnerships with their various missionary bodies and there was a shift from a purely religious missionary bodies on the continent, and greatly diluted religious education with semi-secular education, which emphasized the contribution of the school in the promotion of colonial interests in Africa. Eventually, European colonial powers started making systematic efforts to educate Africans away from their culture. This policy of pulling Africans away from their traditional values and culture was more pronounced in French colonial policy than English colonial policy.

French educational and colonial policy was one of total assimilation or association. In terms of quality, structure, curriculum, examinations and certificates, French colonial schools in Africa were almost exactly like their counterparts in France. Officials of he Ministry of Colonies in Paris established curricula for African students; the African schoolchild was taught to recite countless French poems, to sing French songs, learn French literature and history, to contend with French secondary and high school teachers, and to grapple with the French language as a medium of instruction. According to William Bryant Mumford (1970) by the time the African child qualified for the Baccalaureat he was "French in all but the color of his skin." The following is what Mumford (1926) wrote from a personal assessment of the quality of French colonial schools in Bamako, West Africa: "the general impression gained from a visit to the Bamako Schools was that the institutions were equal in standing and equipment to the best that Europe can produce. Using the term in its biological sense, these schools are the 'growing points' of French civilization in Africa." Generally, French colonial education was in essence a nucleus of native aristocracy who would eventually propagate French ideals and uphold French ways of life.

British colonial and educational policy "made efforts, though somewhat superficial and insincere, at adapting colonial education to African situations" (Fafunwa & Aisiku, 1982). British colonial educational policy was, as opposed to that of the French, one of indirect rule, partnership, or adaptation to African conditions. This policy was clearly witnessed in Northern Nigeria. Consequently, Britain suggested vocational education in place of the prevalent academic education. However, this British preference for vocational education was not sufficiently backed up by practice because there was no corresponding growth in industry, agriculture and commerce to guarantee recipients of vocational education a place in the job market. In Kenya and Tanzania British colonial education and teaching was characterized by segregation. Here, different schools were established for different racial groups (Europeans, Asians, Arabs and Africans). Another characteristic of British colonial indirect or partnership education was the introduction of grants-in-aid with its resultant classification of schools into aided and unaided schools in some British colonies. This policy intensified the demands of Africans for more governmental involvement in education. In Tanzania, political parties like TANU (Tanzanian African Union) opened primary schools and turned them over to parents' associations. Meanwhile British educational policy was characterized by such teamwork between governmental political parties and the people, French educational practice was not.

Critique

There is no doubt that colonial education or European education in Africa benefited and still benefits some Africans. African leaders such as Nkrumah, Nyerere, Kaunda, Ahidjo, Awolowo, Mubutu, etc. paid great tribute to western missionary colonial education of which they were products. However, many of them, including many contemporary African elites and scholars, have criticized colonial teaching and education for the following reasons:

Colonial Teaching and Education Taught African Children Values that Were Totally Opposed to the Ones in Their Tribal Societies

Colonial education, by teaching African children who had been raised as inextricable members of large extended families and tribes the concepts of freedom, individualism,

and democracy, disoriented and confused them rather than helped them to grow as useful members of their communities. By prioritizing respect for knowledge and class over respect for age, and learning in quiet structured non-ethnic environments over learning in unstructured, family-oriented environments, it confused many African children. According to Ferkiss (1966, p. 165) colonial education taught African students "white values at the expense of directly or indirectly African ones but – partially through design and partially through lack of knowledge and of teaching materials – unfitted Africans for life in their own country." No wonder therefore that a large segment of educated African live in urban centers which do not reflect the true nature or developmental state of the larger Africa, or live in metropolis in which their educational attainments have prepared them to live and feel comfortable.

Colonial Religious Teaching and Education Changed, and Still Changes, the Identity of African Children

Colonial religious education, by converting tribal African children into Christianity and giving them new first names, and by condemning their tribal values as pagan and satanic, compelled them to distance themselves from their old tribal identities and to pick up new western identities. This made people like Julius Nyerere to grab Julius Ceasar's first name, Kwame Krumah to pick up the name "Francis" and for a while to think of joining the priesthood (Nkrumah, 1957, p. 23), and Milton Obote to pick up and own John Milton's last name. Of course, peoples' names certainly accentuate and substantiate their cultural identity, and changing a person's name is a way of suggesting that his culture is inferior or not important.

Colonial Teaching and Education Contributed in Teaching African Children to Hate Manual Work

In colonial schools, African students were generally taught good behavior by being punished to work in the school gardens, to pick up rubbish and debris in the compound, or to clear the football field. Doing these physical works primarily as a punishment taught African students to hate farming and clearing and to consider them mainly as forms of punishment reserved for deviants, instead of as necessary duties in a predominantly agrarian society.

Colonial Teaching and Education Contributed, and Still Contributes in Teaching African Students Rote Learning

Colonial education particularly emphasized verbal skills, memorization, and rote learning which are all hostile to original thinking. Rote learning continues to be a problem that plagues African education up till today (Ferkiss, 1966). As traditional African education, colonial education did not teach African children to be creative and to deviate from popular thought patterns. It encouraged and rewarded obedience

to the teacher's authority and severely punished deviants. In it teachers gave notes, students copied them, memorized them, and regurgitated them back to the teacher in the event of an examination or test. In it, the notes the teacher gave students were generally the same notes the teacher had been taught by his own teacher. Rote teaching and learning were and are still greatly encouraged in Africa by the paucity of textbooks, the fact that students are taught in a foreign language, and the lack of modern techniques of teaching and learning.

Colonial Teaching and Education Failed to Teach Africans to Synthesize "the old and the new, the universal and the uniquely African" (Ferkiss, 1966)

The result is that "Africans have not been able to live as confident members of the world community" (Ferkiss, 1966). Instead, "The African elite, by virtue of the education he has received, has become a Europeanized African whose cultural values have been misplaced, in terms of African culture at least" (Cox, 1974, p. 52). And because his cultural values have been misplaced, he spends much of his time not knowing how to genuinely develop Africa. He has no confidence in his knowledge base that is made up of a conglomeration of incompatible western, eastern and Afrocentric paradigms, and he cannot fully use his knowledge to the full advantage of his continent (Marah, 1989, p. 112).

Colonial Teaching and Education Were Generally Biased Because They Tended to Focus on the Negative Aspects of African History and Civilization, and the "Juicy" or Positive Aspects of European History and Culture

For example, the Mullah of Somalia was described as "mad" because he recalcitrantly opposed Europeans for their attempts to subjugate Somalian people by negating their lands (Jardine, 1969). In his days, Sekou Toure was so angry by the way African heroes were denounced by the French colonial educational system that he challenged colonial education by asserting that if Samori Toure was being portrayed as blood thirsty, then Bonaparte was even more so (Panaf, 1978, p. 30).

Colonial Teaching and Education Taught African Students to Develop Notions About Class that Were Incompatible with Their Agrarian African Background

In colonial education teachers, by always dressing like westerners (in a well-iron trousers, shirt and tie, and sparkling shoes), made African students to equate western education with a future life of leisure (Mazrui, 1978, p. 222). Similarly, colonial teachers and administrators, by generally distancing themselves from any form of practical work and by confining themselves to pleasant office duties, indirectly taught the African student to see himself as a future office worker in a modern town or city.

Colonial Teaching and Education Were Not Out to Teach the African Masses

Rather, they concentrated on educating a small minority of Africans uprooted from their culture, and sending them back to teach their African brethren about the superiority of their new European masters, and the inferiority of their fellow Africans. Colonial teaching and education, therefore, symbolized "miseducated individuals graduating, then proceeding to teach and miseducate others" (Wesley & Perry, 1969, p. vii). It "schooled" miseducated Africans out of their cultural environment and taught them "irrelevant" mannerisms, knowledge and skills so far as the genuine development of Africa and African people was and is concerned. Certainly, lawyers, teachers, nurses, dentists, architects, and medical doctors were needed in Africa, but far more needed were Africanized African teachers, nurses, lawyers, dentists, architects and medical doctors (Marah, 1989).

Colonial Teaching and Education, Exposed African Children to Rigid and Almost Cruel Testing and Evaluation System

Colonial education, compared to traditional African education, laid stress on too many individual tests and resulted to too many failures. While there were minimum or no failures in traditional African education, there were too many failures in colonial education. Colonial education tested, and still tests African children more intensively than traditional African education. From class one through secondary and post secondary education, the African child did not only have to pass academic tests, but also social, cultural and values tests. Even his conduct, mannerisms, and ways of dressing were tested. His behavior was expected to conform to the norms of the Europeans who colonized him. Both Sekou Toure and Kwame Nkrumah were given poor evaluations by their colonial teachers even though they were ranked very highly by their fellow Africans. Sekou Toure was not recommended to attend an academically oriented school because his conduct was seen as dangerous to France (Panaf, 1978, p. 30). Similarly, Kwame Nkrumah could not go to Achimota because his grades were considered too low for admission (Nkrumah, 1957, p. 23).

Before the coming of colonial education, African societies were not socially stratified or ranked in the same way as western societies. Rather, they were societies in which the young and the old, the poor and the wealthy, and the slave and the master often interacted without much fuss. However, the coming of colonial education introduced in Africa a rigid, almost cruel assessment and evaluation system. This writer attended Saint Patrick's Roman Catholic School in Ntambeng, Cameroon. Examinations in Saint Patrick School, as in all other missionary primary schools in the region, were given at the end of each term or semester. The day for "reading results" was a real terror for the infant scholars. "Reading results" ("ntong akwa-ni") took place in a public assembly in the presence of all the pupils, teachers, invited parents and general public. The children stood in two perfect line, by class, facing the rest of the audience, as each class master loudly read out the names of the passers in his or her class. Passers whose names were announced stepped out, separating themselves from the failures who remained standing in line. Generally, passers names were read by merit, from the fist to the last. "Reading results" was a real emotional hell for infants waiting with throbbing hearts, in the presence of their parents and friends, to hear their names read. So frightening was "reading results" that occasionally, one or the other of a trembling and sweating infant, fainted because of fear that his name will not be read. When the teacher finished reading the names of the passers, the audience clapped for them, and jeered at the failures left conspicuously standing in line, thus making things worse for already frightened kids.

As a routine, children who passed were carried home shoulder-high by their parents and friends, while those who failed attempted to ran away from their parents to the forest or isolated place to hide. So intense was the disgrace and pain of failure that on one occasion a pupil who failed hurried to a nearby river and drowned himself. Some children who could not handle the shame of failing examinations dropped out of school, went to the city, and become gangsters. For many school children in my days, schooling was a real pain, and many of my friends were rightly angry and frustrated for being the victims of a rigorous testing system that failed to recognize the traditional African less stressful assessment and evaluation approach.

Colonial Education Entrenched Foreign Languages in Africa (English, French, Spanish, German, Portuguese and Africans) in Addition to the Already Existing Polyglotness on the Continent (Denny, 1963)

The use of these foreign languages, up till today, has prevented the institutionalization of a traditional pan-African lingua-franca that can facilitate meaningful discourse among Africans from different tribal backgrounds. Some contemporary African scholars, however, see the possibility of the rise of a super-pan-Africanist-patriot, linguist who can someday device a pan-African language that will be a synthesis of Bantu, Semitic, Arabic, Swahili and the western languages currently spoken in Africa today (Fafunwa, 2002; Marah, 1989, p. 120).

The State of Post Colonial or Contemporary Teaching and Education in Africa

Introduction

When African nations became independent of colonial European rule in the 1960s, they initiated aggressive policies to reform teaching and education and to adapt them to local needs. Today, about 50 years after African nations became independent; the state of African teaching and education is still far from satisfactory and poses a real challenge to African nations. The immutable nature of colonial teaching and education in Africa despite persistent efforts to abrogate them by contemporary African educational leadership reveals to us the profound effects of the European ideologies of colonization and assimilation on the colonized peoples of the world.

Strategies Used by African Nations to Harmonize Western Teaching and Education with Local Conditions

Strengthening of School-Community Relationships

Research (Colclough, Al-Samarrai, Rose, & Tembon, 2003) holds that parental involvement in African schools is limited despite the presence of school committees and parent-teacher associations. In Tanzania, Malawi, Mali and Uganda, international organizations such as UNICEF, DANIDA, USAID, and DFID have taken the initiative to work with local populations to educate and strengthen the role of local school committees over school teaching, employment and expenditure (Peasgood, Bendera, Abrahams, & Kisanga, 1997). Reports from Mali indicate that community management in schools is currently strong, ensuring that school values and curricula are in conformity with needs of the children.

Establishment of Flexible School Calendars and Schedules

Some research suggests that in Africa some schools have adjusted the school calendar to assure students survivability and comfortability. Such adjustments involve harmonizing the school calendar with: the long distances children to cover from home to school, high peak harvest seasons, and seasons of terrible climatic conditions. For example, in Malawi, the school calendar, which previously ran from October to July was changed in 1997 to begin in January with long holidays coming up in November and December (the beginning of the hunger months). Here too, some boarding and tertiary schools are closed from October to December as a result of the problem of water shortages (Kadzamira & Rose, 2001). This strategy has led to a reduction of student absenteeism and school dropout rate. Also, in Mali, community schools have successfully implemented flexible school calendar and schedules requiring: (a) the school term to begin at the end of harvest time in November and ending at the start of May, and (b) that classes hold for 2–3 h a day, 6 days a week for 6 1/2 months. These changes have led to an increase in girls' enrolments in Malian community schools.

Formation of Sensitization Campaigns for Female Education

Traditional African societies have historically considered western formal education a male thing rather than something for females. The philosophy of many traditional African societies has historically been that education is for boys so that through it they can have a job, earn money, get married and feed their wives and children. Education is not for girls because they are born already with the duties of being house wives, food cultivators, and raisers of children. In many nations of Africa, this philosophy has for long greatly affected the enrollment of girls in schools.

However, in recent years, this trend has changed. Community sensitization campaigns have proved successful in increasing parental and societal awareness on the importance of schooling, particularly for girls (Colclough et al., 2003). In Ethiopia, sensitization campaigns have been successful partly because of their integration with local government

and traditional leaders. Similarly, in Zambia, FEWE and the Alliance for Community Action on Female Education have worked synonymously with community leaders to sensitive people on the importance of girls' education (Kasonde-Ng'andu, Namiloli, Imutiwana-Katukula, 2000). In these nations campaigns seem to work better when they are integrated with other measures, such as: reduction in school fees or the cost of schooling, remodeling of school schedules to let off girls during high peak agricultural seasons, the use of female leaders during the process of campaigns, and presentation of radio-television plays showing female excellence in education. In Malawi, the use of the radio-television strategy in marketing girls' education, made USAID researchers to conclude in one of their studies that in Malawi education had been successfully marketed before being successfully produced (O'Gara, Benoliel, Sutton, & Tietjen, 1999).

Use of Incentives to Attract Female Teachers

In many African nations, the teaching force remains predominantly male at both primary and secondary levels. The gender distribution of teachers and their distribution with respect to rural schools and cosmopolitan schools is greatly influenced by government policies.

- In Senegal, in 1998, about 24% of teachers in primary schools are females and most of them are placed to teach in urban schools.
- In Ethiopia and Tanzania, female teachers are generally hired to teach in schools that are located near to towns or near main roads.
- In most West African nations, it is government policy to send female teachers to teach close to where their spouses are working. This policy makes it possible for many female teachers to be hired to teach in West African urban schools.
- In Zambia, on the other hand, the PAGE program has been used to encourage female student teachers to work in rural areas by emphasizing its importance and its opportunities for promotion to out-of-town management positions (Kasonde Ng'andu, 2000). However, persuasion alone does not seem to be enough, given the harsh conditions in some rural areas.
- East and Central African countries propose direct financial inducement, construction of good teacher houses near schools, and periodic easy transportation for teachers to town as incentives to encourage female teachers to accept work in remote rural schools (Colclough et al., 2003).
- In both Malawi and Mali authorities have increased the number of female teachers working in remote rural areas by recruiting and training local individuals and subsequently assigning them to schools in their own village. A study of the community schools in which this strategy has been adopted has not revealed a drop in students' academic performance even where new female trainees have lower qualifications than their more experienced colleagues (Hyde, 1999; Muskin, 1999).
- In Many African nations, female teachers often have a heavier work-burden in the home, compared to their male counterparts, and may tend to be reluctant to accept additional responsibilities in school. Ugandan educational authorities, in

order to induce female teachers to accept additional responsibilities in schools, have proposed that each primary school should have at least one senior female teacher trained to provide guidance and counseling for which she must receive a salary increment of 5% in recognition of the additional responsibility (Tamushabe, Barasa, Muhanguzi, & Otim-Nape, 2000).

Institutionalization of Adult Non-Formal Education Programs

Many countries are undertaking non-formal adult literacy education programs, particularly for mothers, because they are considered to have a significant impact on the schooling of girls. However, in some countries they are a forgotten priority because of the adoption of the policy of universal primary education. In Malawi, adult education programs, run by the Ministry of Community Services, are not connected with the Ministry of Education, and are small and in need of funding (Kadzamira & Chibwana, 2000).

In Senegal, which has much experience in the implementation of adult non-formal education programs, the government has adopted the strategy of contracting their institutionalization to private providers. This policy led to a reduction of the adult literacy rate by 22% points between 1988 and 1998.

Reforms to Accommodate Pregnant Pupils

In many African countries, pregnant girls have historically dropped out of school, without coming back to school to complete their studies. In many countries girls are formerly expelled from school if they are found pregnant. In recent years, countries such as Malawi, Tanzania, Guinea and Senegal have formulated policies that allow pregnant girls to come back to school after they have given birth. However, in the few African countries that seem to have the return-after-birth policy, there is a virtual absence of clear cut policy relating to conditions of readmission, the handling of negative stereotypes against returning mothers, and the sort of teaching and counseling that should be given readmitted mothers (Swainson, Bendera, Gordon, & Kadzamira, 1998). The former, by consequence, means that many girls who become pregnant continue to stay out of school for good. The educational systems of many African nations are seriously looking at possible solutions to this problem.

Strategies Aimed at Regulating Class-Size or Teacher-Student Ratio

African nations face enormous variations in pupil-teacher ratio. In many of them, the number of pupils per class needs to be reduced, while in others there is scope for an increase of pupils. National class size averages masks enormous variations between regions, zones, schools and classes within the same school. In many countries class sizes are higher in urban schools and lower in rural schools, and in many schools there is high enrollment and larger class sizes in the first three grades

of primary schools. In Malawi, at the start of the century, the average pupil-teacher ratio ranged from 119:1 in Grade 1 to 27:1 in Grade 8 (Kadzamira & Chibwana, 2000). In most African nations, a reduction in the pupil-teacher ratio will certainly require the employment of more teachers, use of more classrooms and the need of more school running cost. Some nations face a desperate situation in which the average teacher-class ratio is less than one, suggesting a critical shortage of teachers which calls for a the merging of several classes under one teacher or the abandonment of some classes to play or do manual work during formal class time (Avotri, Owusu-Darko, Eghan, & Ocansey, 2000; Tamushabe et al., 2000).

Efforts to Reduce Gender Disparity in Academic Output

In African schools, as a rule, boys and girls tend to participate roughly equally in classroom activities in the lower grades. However, in the upper grades, boys tend to be more active than girls. Studies of test results reveal equal academic achievement between boys and girls in the fourth grade of primary school and an achievement advantage for boys by the sixth grade of primary school (Colclough et al., 2003). National statistics in a majority of African nations reveal that boys outperform girls in primary school leaving examinations, and that more boys than girls continue education to higher school. This has partly been attributed to low self esteem on the part of girls, perpetuated by a school environment with hostile stereotypes and gender-insensitive behavior directed at girls by textbooks, peer group members and teachers. Measures aimed at reducing eliminating negative stereotypes and raising the self-esteem of girls include a revision of textbooks and a provision of counseling for girls. These efforts are thwarted by the fact that when textbooks are revised many teachers, particularly in remote schools, continue to use copies of the old textbooks (Kasonde-Ng'andu et al., 2000). Counseling, especially by responsible female role models, gives girls more confidence in their own abilities, and helps them through academic and emotional difficulties, especially during puberty. For counseling to be effective, teachers need good training and other support.

Particular effort has been made to counsel girls to take an interest in mathematics and science where their performance is has been persistently low. Since 1996, FEMSA (Female Education in Mathematics and Science in Africa) has been working in a number of countries improve girls' performance in these subjects by providing supportive environments for girls (O'Connor, 2000). An important cause of girls' under-performance in these subjects is the lack of self-confidence. Reform strategies have targeted attitude change, curriculum development, more effective teacher education and review of assessment and evaluation methods. To resolve this problem, Zambia has with the support of PAGE, successfully piloted single-sex classes in mathematics and science (Kasonde-Ng'andu et al., 2000). Similarly, Malawi has witnessed an improvement in girls' performance by gender-streaming selected subjects in the upper primary classes as part of the GABLE program (Kadzamira & Chibwana, 2000). In schools where two streams exist, it is easy to separate pupils by gender at little or no cost.

Efforts to Improve Teacher Under-Qualification and Ineffectiveness

Both under-qualified and totally untrained teachers constitute as much as 71% of the entire African teaching force (Fafunwa & Aisiku, 1982, p. 144). While it may be true that good teachers are born and not made, it is truer that the effectiveness of the teacher is largely influenced by how well he is trained. A major reason for the employment of under-qualified teachers is massif recruitment (after brief pre-service training) to meet the increasing needs of ever expanding educational systems. This situation is made worse by the fact that both qualified and under-qualified teachers work for many years without any form of in-service training or professional enrichment programs. Resultantly, many long-serving teachers are not able to adapt their teaching methods and subject contents to changing curricula. Many African governments are now institutionalizing pre-service and in-service educational professional enrichment programs.

Need to Improve Teachers' Payment and Work Conditions

Many African teachers work under pathetic wretched conditions. Teachers' working conditions and incentives strongly influence their moral, their eagerness to do good work and the quality of services they provide. Similarly, the quality of the people joining the teaching profession is a function of the remuneration offered for teaching compared to other professions competing with teaching for people with the same qualifications, skills and training. In recent years, teachers in many nations have experienced humiliations, frustrations and disillusionments over decline in salaries, late payment of salaries, complete suspension of salary payments, and poor conditions of service. In some nations things are so bad that primary teachers do not have money to eat well and have to live on vague promises or salary supplements from parent-teacher associations. Most African governments claim that they cannot carry out an increase in teachers' salaries without a corresponding increase in the salaries of other civil servants, yet in many countries teachers are clearly seriously disadvantaged when compared to their other civil servant peers. Many national governments are currently reviewing strategies for improving the ridiculous financial dilemma of teachers.

Efforts to Ensure the Supervision of Teachers

Good education is partly the product of reliable administrative and supervisory support of teachers from school heads and inspectors. However, some research suggests that few head teachers have good training or sufficient time for their job (Rose, Yoseph, Berihun, & Nuresu, 1997). In some nations, head teachers have to combine both teaching and administrative functions, leaving themselves with little or no time to effectively focus on the work of supervising and correcting other staff (Kadzamira & Chibwana, 2000; Rose et al., 1997).
Efforts to Indigenize the Languages of Instruction

In many African nations, children in primary schools are instructed using the languages of dominant colonial powers instead of their ethnic languages. Using colonial languages as the languages of instruction in the early grades of schooling makes it difficult for small African children to understand and express themselves in them. Some sources have proposed that children should be taught at the initial levels of education in their local languages, and then progressively moved to a second or foreign language in later classes, as appropriate. Opinions differ widely on this issue. Some parents feel that such a policy will impair children from learning English, French or Spanish which they consider are critical in improving their children's future chances in the job market. Some people also think that local languages are not equipped to deal with scientific and technical concepts. Mali, however, has succeeded in resolving this linguistic problem; it has successfully implemented popular a child-centered bilingual education program called "Pedagogie Convergente" which uses national languages side by side with French as the medium of instruction. The advantages of this program include: lower repetition rates, lower drop-out rates, higher attendance rates, higher promotion rates, and better performance in all subjects. Other nations that have used local languages for instruction include Ethiopia (which used Amharic) and Malawi (which used Chichewa). The main problem related to the use of a local language for instruction is the high cost of textbooks written in local languages (McNab & Stoye, 1999).

General Recommendations for the Improvement of Teaching and Education in Contemporary Africa

Introduction

Given the fact that the above-mentioned initiatives by African governments and educational leadership have not completely turned around African teaching and education to suit the traditional cultural expectations of Africans, this section focuses on some recommendations that can help improve teaching and education in Africa. The recommendations are particularly addressed to the classroom teacher considered in most societies to be the first steward of education, to the political and educational leadership in different African nations, and finally to the general public. The recommendations take into consideration the positive aspects of pre-colonial traditional African education, colonial education, and current results of contemporary scientific research findings on teaching and education in Africa. These recommendations are as follows:

Institutionalization of an Integrated Global Curriculum by Educational Leadership in African Nations

For African schools, an integrated global curriculum is one that emphasizes a study of universal human problems without ignoring a focus on traditional African problems,

that seeks to promote the interest of the humankind as a species without marginalizing that of Africans as members of tribal extended families, and that aims at enabling African students see not only the differences between themselves and other humans but also the similarities between themselves and other humans. An integrated global curriculum is also one that permits African children to be admitted into school as the sons and daughters of different tribal societies and to graduate from school as members of a common worldwide community, each one of them furnished with a wide variety of cross-cultural values, worldviews, and behavioral patterns. It is a curriculum that has the capacity to teach African students not only the skills they need to take up future careers but also the capacity to teach African students how to benefit from the richness and complexity of the fast changing world that today constitutes their reality. Moreover, an integrated global curriculum is one that permits African students to see their own image in the educational process, to develop a high sense of self esteem, to learn from the known to the unknown, and to cope competently with the challenging scholastic, cultural, economic, and political expectations of a rapidly changing global economy.

Institutionalization of a Traditional Lingua Franca for Africa

Brother Aliu Babkunde Fafunwa of the Center of Advanced Studies of African Society (CASAS), Cape Town, has in an article entitled "Education, Mother-Tongue Instruction, Christianity And Development of an African National Culture" (Fafunwa, 2002), proposed the institutionalization of an indigenous pan-African language or lingua franca as a means of improving contemporary educational crisis in Africa. I recommend that African educational leadership should give this proposal serious consideration. Fafunwa (2002) writes as follows: "Africa appears to be caught between the reality of a social, economic, political and cultural legacy inherited from its former masters, and visions and hopes for a new order which are still conceptually vague in the minds of those engaged in shaping its future. With almost fifty years of post-colonialism there is a loss of a convincing sense of direction, in most areas of social life. This has created a realization of the pressing need for a new vision of where we want to get to. Few areas of this crisis are as marked by this bankruptcy of vision as the field of education in general, and the language of education in particular The policy of switching from another tongue to western languages in education, in all its forms, represents a foundation for the maintenance of a neo-colonial culture and the entrenchment of cultural backwardness in Africa." Fafunwa adds that "the growth of knowledge is influenced by the first language of the learner, and in particular, by the metaphors embodied therein" (Fafunwa, 2002).

Suppression of Appetite for the Indiscriminate Use of Foreign Goods and Ideologies

Ogunniyi (1996, p. 274) cautions that there is a need for Africans (including teachers) to curb their appetite for imported goods (including knowledge) because permitting the alternative, according to Ogunniyi, can result to a loss of African initiative to

produce their own goods and to the creation of an everlasting dependency by Africans on foreign powers. According to Denzin, in Lincoln and Denzin (1994, p. 574), curbing addiction or the appetite for foreign goods (including knowledge) may call on Africans to adopt Foucault's concept of subversive genealogy, a strategy in which people refuse to accept those goods and systems of discourse that ignore their own interests as a people or as individuals.

Development by African Teachers of a High Level of Self-Esteem and Professional Pride

Teachers of African children cannot resolve the above-mentioned problems of in African teaching and education without developing rugged pride in themselves and in their work. Teachers in many parts of Africa have low self-esteem because of ridicule from society and poor pay for the work they do from their national governments. In many nations of African many people look low on teachers, make fun of them, and consider them people who teach just because they cannot find anything else to do.

The African public needs to know that until teachers are given peace of mind and socio-economic status commensurate with the great responsibility they carry, teaching will remain a sick profession and any efforts to improve education will be futile. African governments must make serious effort to, at best, close the gap between the low salaries of teachers on the one hand and the high salaries of other civil servants on the other hand, or at worst, significantly narrow it down. African nations must understand that the services of the teachers in their societies are as valuable as those of other civil servants. They must know that unless they acknowledge and act upon this reality everybody in society will continue to despise teaching as a profession, shun it, and regard it a refuge for failures. One way to encourage teachers is to institutionalize a system of teacher promotion that goes with benefits in the form of advances in salary based on training, longevity, consistent hard work, or professional effectiveness. The primordial and critical nature of the teaching profession makes it worthwhile to grant teachers such benefits; and the great educational needs of African children makes this obligatory. There is surely no doubt that the cost of uplifting teaching to the status of other professions will be high for the governments of African nations, but the advantages that will come with it will be inestimable.

Adoption of a Cultural Relativistic Pedagogy

Africa is a very traditional society and African students, like most people, have great love for their tribal cultures, and are not comfortable with teachers who ignore or marginalize African cultural values in the process of teaching. Culture, technically, is that vast structure of behaviors, ideas, attitudes, values, habits, beliefs, customs, language, rituals, ceremonies and practices, peculiar to a particular group of people which provides them with a meaningful design for living and interpreting reality. Culture permits those who own it to differentiate between what is real and what is unreal. It serves as a royal highway on which all of human behavior takes place. It allows those who own it to recognize phenomena, and to respect certain logical relations amongst phenomena. Culture enables its owners to know where they have been and what they have been, where they are now and what they are, and most importantly where they still must go and what they still must be. Culture has the power to shape the behaviors of those who own it. No behavior that is human takes place outside culture. Culture, therefore, represents the stuff in which the entire process of human development and education are situated. All aspects of education, including classroom management, curriculum building, staffing, educational philosophies, methods of instruction, and assessment and evaluation are in reality cultural phenomena. Culture is to humans as water is to fish; it constitutes the total living environment of human beings. The nature of the water in which fish is found determines the type of fish found therein, including the degrees of its strength, comfort and survivability. Just as river fish in sea water will die because the water is too salty, and just as sea fish in river water will die because the water is too flat, same too someone in a culture that is not his or her own, or someone treated in disrespect of the principle of cultural relativity, will feel suffocated, paralyzed, incapacitated, and unable to get the most out of life or to live life to the fullest.

Taking into consideration the overwhelming importance of culture in the education and behavior of those who own it, it is critical that teachers of African children use cultural relativistic teaching approaches that project the traditional cultural values of African children. Of particular importance in this respect is the adoption by African teachers of the following approaches that distinguish traditional African teaching from Euro-American teaching:

- (a) Teaching that puts partnership or collaborative learning above independent or individualistic learning,
- (b) Teaching that emphasizes outdoor or field-oriented learning far more than indoor classroom learning,
- (c) Teaching that emphasizes an informal, high-keyed or a more verbally-engaged pattern of classroom interaction far more than teaching that stresses a formal, low-keyed or a more verbally-suppressed pattern of classroom interaction,
- (d) Teaching in which the teacher employs age as the main criterion of respect for students rather than education and class as the main criteria of respect for students, and
- (e) Teaching that puts oral assessment and evaluation above written assessment and evaluation.

Integration of the Learning Style of African Pupils into the Classroom Knowledge Dispensation Process

To be good teachers of African students, teachers must know that there is no one teaching approach or method that satisfies the learning demands of all students (including even students from the same ethnic, class or gender group). Good African teachers must realize that even though students may share some core cultural commonalities with other members of their group (which must be respected in the

teaching process, they at the same time have considerable individual differences that must also be taken into considerations in the knowledge dispensation process. The main professional challenge of the good African teacher is, therefore, to inquire, recognize, and implement the different values, learning styles and teaching techniques that work for individual students or for students from specific tribal groups.

In order to understand the above-mentioned different values, learning styles and teaching techniques that work for various students, good teachers of African students should not be reluctant to carry out research on their students. Good teachers of African students can best carry out research on their students by:

- (a) Obtaining and studying each student's personal scholastic records, or
- (b) Writing a contact or fact-finding personal letter to the parents of their students at the beginning of the semester.

If good teachers of African students choose to write a contact or fact-finding letter to a student's parents, the letter must be written early at the beginning of the semester. Also, it must be precise, polite, holistic, and indicate that parents' interaction with the school is critical for the successful education of their child. Gloria Boutte (1999) gives us a good example of such a letter. Parents are, generally, very interested in their children's education and are always very willing to give teachers helpful non-threatening information them.

Good teachers of African students must use any information parents provide to help rather than ridicule or frustrate students. They must use the information obtained from parents to determine:

- (a) If the African student should be given analytical/subject-specific teaching or global/collaborative teaching,
- (b) If the African student has a particular intelligence that can be used as a basis for instruction,
- (c) If African parents have any particular values or expectations they want the school to impact on their children, and
- (d) If the African student has some particular positive qualities which can be developed or problems which need to be addressed.

Adoption of Multiple Roles by African Teachers

A good teacher of African children must be sensitive to the fact that he or she is a multiple role player. He or she must know that society looks on him/her as a multiple role players: as teacher, counselor, leader, moral determinant, and second parent of students, role model, and more. Therefore, a good teacher of Africans is not only one who teaches the student academic knowledge but also one who sees himself or herself as having multiple roles, for example, the roles of parent, counselor, leader, moral determinant, and more.

- As a counselor the teacher of Africans must apart from teaching refined academic knowledge give his students advice on a wide variety of issues.
- As a leader he or she must have: a strong drive of responsibility and task completion, vigor and persistence in the pursuit of goals, venturesomeness and

originality in problem-solving, strong drive to exercise initiative in social situations, self-confidence and sense of personal identity, willingness to accept the consequences of personal and group decisions and actions, readiness to absorb interpersonal stress, willingness to tolerate frustration and delay, ability to influence other people's behavior, and capacity to structure social interaction systems to the purpose at hand (Stoghill, 1974, p. 81).

- As a moral determinant he must be one who projects good and honest behavior for his students to copy. He must also be somebody who sees his conduct, at all times and in all ways, as a moral matter, and who knows that everything he or she does while in contact with students carries with it moral weight. He must always be sensitive to the fact that every response to a question, every assignment handed out, every discussion on issues, every resolution of a dispute, every grade given to a student carries with it the moral character of a good multicultural teacher. This moral character can be thought of as the manner of the African teacher. African teachers who understand their impact as moral educators take their behavior quite seriously; they understand that they cannot expect honesty from their students without being honest themselves, or generosity from them without being generous on their own part (Goodlad, Soder, & Sirotnick, 1991).

Respect of Gardner's Concept of Multiple Intelligences

H. Gardner's research (1993) alerted the scholastic world that students have multiple natural intelligences and varied orientations to learning. Gardner posited in his research that all human beings are capable of several independent forms of knowledge and information processing techniques, which scholars can see as unique "intelligences." He identified the following eight types of intelligences: logical mathematical, linguistic, musical, spatial, kinesthetic, interpersonal, intra-personal, and more recently, and naturalist intelligences. The first two types of intelligences in this list are those schools typically regard as the primary forms of intelligence.

Gardner's notion of multiple intelligences should be considered an important concept by all good teachers of African students because of the following three reasons:

- (a) It reminds teachers of the notion that all students have the ability to learn,
- (b) It draws their attention to the fact that one single hegemonic intelligence or philosophical tradition has erroneously dominated traditional western education, and
- (c) It reminds them to create diverse or multidimensional teaching/learning techniques that can permit African students to discover, develop and combine their particular strengths with other types of intelligence s (Nieto, 2000; Oakes & Lipton, 1999).

Cultivation of High Expectations for All Students, Without Exception

Good teachers of African children must have high expectations for all their students without exception. Teacher's expectations have a subtle but powerful effect on students' outcome. Although it is readily acknowledged that children's success in school is

due to a wide range of complex factors, teachers who teach African students must recognize the expectations they have of their students goes a long way in determining their students' destinies. The Theory of the Self-fulfilling Prophecy (Lindsey & Beach, 2002, p. 145), frequently discussed in educational circles, appears to be unknown or very easily forgotten by many African teachers. According to the theory, students are fast to internalize or learn their teachers' expectations of them, and tend to behave in ways that match or fulfill their teacher's expectations. The theory also holds that teachers with low expectations of their students tend to behave in ways that eventually make their low expectations come true. In a study of schools, Claude Steele (1992) concluded that a major cause of school failure by some students is the devaluation or low expectation that they face from their teachers.

Development of Good Communication Skills with Students, Parents and the Larger Public

Effective teachers of Africans must use communication skills that permit all or a majority of their students to understand subject content. They must vary their communication techniques so that students who find it difficult to understand one communication approach can benefit from an alternative one. For good teachers of African students, effective communication is synonymous to constantly crosschecking from the students to know if they are all benefiting from the communication process.

Effective communication, as far as good teaching is concerned, generally gives precedence to elaborate "teacher talk" (Diaz, 2001). The good teacher of African students needs a lot of *talk-time* to inform, question, direct, and evaluate his students, and demonstrate, illustrate, monitor, and manage the teaching process. The teacher is generally the one who talks in class most of the time. Hurt, Scott and McCroskey (1978) and Smith (1971), stated that effective communication is fundamental to successful teaching and learning. Montagu and Matson (1979) carried the importance of good communication one step further by stating that it is the "foundation of community" and "the essential human connection." Carlos Diaz (2001), however, indicated that "Oral instruction should be amply supported by visual cues and hands-on experiences."

Formulation of New Paradigms Appropriate to the Specific Needs of African Nations

Thomas Kuhn (1970, p. 15) used the word paradigm to describe the "entire constellation of beliefs, values, techniques, and so on shared by members of a given [scientific] community." Guba and Lincoln (1994, p. 107) defined a paradigm as a set of basic beliefs that deals with ultimate or first principles. They added that a paradigm represents a worldview that defines, for its holders, the nature of the world, the individual's place in it, and the range of possible relationships to that world and its parts, as for example, cosmologies and theologies do. I am using the word paradigm here to mean an interrelated set of facts, concepts, generalizations, and theories that attempt

to explain human behavior or social phenomena and that imply policy and action. Paradigms compete with one another in the arena of ideas and policy making; they mirror and perpetuate specific ideologies and lead to different educational policies and practices (Banks, 1988, p. 103).

Paradigmatic beliefs are basic in the sense that their acceptance is based far more on faith than on logic, and there is no way to establish their ultimate truthfulness. Guba and Lincoln (1994) indicate that any given paradigm represents simply the most informed and most sophisticated view devised by its proponents on: (1) The ontological question "What is the nature of reality?," (2) The epistemological question "What is the relationship between the knower or would-be knower and what can be known?," and (3) The methodological question "How does the researcher go about researching what he or she believes can be known?" Schwandt (in Denzin & Lincoln, 1994, p. 118) points out that the meanings of paradigms are shaped by the intent of their users.

Acquisition of In-depth Knowledge of Subject Content, Professional Skills and Values

For teachers of Africans to teach with confidence, precision and competence, they must possess the following three things: a good knowledge of subject matter, a good knowledge of professional skill or know-how, and appropriate moral values.

Subject Matter

Having a good knowledge of subject matter implies that the teacher must know far above his students. A teacher who is academically only one step away from his students can never teach with confidence and excellence. Unfortunately, this is what is happening in many of today's African schools. Some teachers of African schools make their first acquaintance with the subject matter of a lesson just when they are preparing to it, and without having a good understanding of the lesson, they hurry to class to teach it. It is important for teachers to realize that teaching needs expertise and a long period of training and preparation.

Professional Skills

Having a good knowledge of professional skills and training awakens students' interest in what is being taught and kindles in them a love for learning. Since independence in the 1960s many African nations, faced with the problem of the shortage of teachers, have engaged untrained teachers to teach in schools. The result of this policy has been a steady fall in students' academic output. Common sense reveals to us that just as an untrained mason cannot build a good house and an untrained carpenter cannot make good furniture, same too an untrained teacher cannot succeed in teaching students. It's about time African nations take the problem of training school teachers seriously and even after full training teachers should be motivated to attend refresher courses in order to be conversant with up-to-date knowledge and teaching techniques.

Professional Values

Having appropriate professional values is synonymous to teaching with enthusiasm and diligence, seeing teaching not just as a profession but also as a vocation, having a burning love for children and a concern for their welfare, and being willing to make sacrifices and to embrace job-related hardships. Unfortunately, many of Africa's teachers fall short in this area, and are more concern with demanding more from society and giving back less to society. Some teachers with such an outlook are zealously energetic when it concerns demanding increased salaries and amenities, but indolent when it comes to preparing and delivering classroom lessons. Inculcating professional values in African teachers, calls for hard work from everybody in society, parents, spouses of teachers, teachers themselves, religious ministers, political ministers of state, policy makers, traditional leaders, friends of teachers, and more. All hands must be on deck to make teaching an attractive, honorable, and enjoyable profession for people who want to teach.

Intensification of Educational Research, Discourse and Publication

Muwanga-Zake (2002) advised that academic research, dialogue and discourse are important avenues of promoting teaching and education in Africa. Mphahlele (1996) agreed with Muwanga-Zake, and observed that discourses are sources of power, ideology and control. Similarly, Lincoln and Denzin (1994, p. 579) believed that emphasizing research and discourse on Africa can help tremendously in playing a vital role in decisive performances ... that shape Africa's emergent political conditions.

General Conclusion

The above analysis uplifts John Locke's Tabula Rasa Theory, which presupposes that the mind, at birth, is like a blank plate that becomes increasingly furnished with a posteriori knowledge (which is opposed to priori knowledge) during the process of growth as the child interacts with other members of his environment through the processes of socialization and internalization. It confirms the hypothesis that we cannot teach pupils well until we know them well. The work highlights the need to examine and retain those positive aspects of traditional and colonial education that can help foster educational excellence in Africa, and to eliminate the negative aspects of traditional and colonial education that hold back current African education.

Biographical Note

Dr. Lawrence C. Awasom is an instructor of Cultural Anthropology, Multicultural Education, and Sociology at the University of Houston and Houston Community College, in the USA. A native of the Cameroon and educated in Cameroonian schools, he received his doctorate at The University of Houston, Central Campus. His research and teaching

focus on Anthropology, Multicultural Education, Education in Africa and Sociology. He is a respected educator who has organized many seminars, conferences, and educational practice for students involved in minority education and in education in Africa.

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GREEK CYPRIOT TEACHERS AND CLASSROOM DIVERSITY: INTERCULTURAL EDUCATION IN CYPRUS

Elena Papamichael

Introduction

While the island of Cyprus has always been multicultural, recent socio-political developments have led to an increase of the population's ethnic, linguistic, cultural and religious diversity. Specifically, the partial lifting of the restrictions of movement across the Green Line in 2003 and the accession of Cyprus to the EU in 2004 led to an increase of the population's ethnic, linguistic, cultural and religious diversity. Consequently, about 6 per cent of the total pupil population in primary schools of Cyprus is non-Greek Cypriot. The total number of non-Greek Cypriots is 80,000, almost 10 per cent of the total pupils in Cypriot primary schools in a total of 55,868 in 341 primary schools – a percentage of 6.7 per cent of the total population (Cyprus Ministry of Education and Culture, 2006). The huge demographic change has created significant challenges for the education system.

In this chapter I investigate the policy and practice of intercultural education in Greek Cypriot primary schools, with an emphasis on the teachers' role. I begin with an overview of the definition and aims of intercultural education, followed by a discussion of diversity in the Greek Cypriot education system. I give a brief description of my research methodology and then I discuss some interview quotes from Headteachers and teachers working in diverse schools, ending with some concluding remarks.

Intercultural Education Definition

The development of an international view and theoretical framework on intercultural education, including an explicit, internationally accepted definition is still ongoing (Coulby, 2006; Council of Europe Committee of Ministers of Education, 2003). Nevertheless, Aguado and Malik provide a working definition of intercultural education; they consider intercultural education to be an:

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching*, 605–617. © Springer Science+Business Media LLC 2009 [e]ducational approach based on respect for and recognition of cultural diversity, aimed at every member of the society as a whole, that proposes an intervention model, formal and informal, holistic, integrated and encompassing all dimensions of the educational process in order to accomplish a real equality of opportunities/results, to promote intercultural communication and competency, and to overcome racism in all its expressions. (1995 in Aguado & Malik, 2001, p. 150)

In the following paragraphs I present the elements of the definition and move on to add the concepts of cosmopolitanism and human rights. First, the definition emphasizes that cultural diversity should not merely be recognized (and, thus, celebrated in tokenistic ways) but respected. I would argue that respect is the most important aim for intercultural education. According to Blommaert and Verschueren (1998, p. 192, original emphasis), the fight against racism can only succeed if 'a true *acceptance of diversity* is taken as the *starting point* of any perspective on society. In fact, diversity has to be taken so seriously that its locus is no longer any type of *group*, but the *individual*. ... This is the only way to escape from the dilemma, which haunts most "multiculturalist" rhetoric, that accepting diversity also stresses diversity, so that it may cause a further distancing between the groups'.

Aguado and Malik recognize that intercultural education needs to address all members of the society; this element makes clear that intercultural education is not simply for schools with large numbers of diverse pupils but for all. It also involves other social groups and institutions – these could be the police, health institutions, universities and the media. Furthermore, intercultural education in this definition is implemented across the board - through any education process available, formal and informal, and through all aspects of the education system. The distinction between equal opportunities and results is also important. Providing equal opportunities can be a slogan which, in turn, reproduces inequalities; in an already unequal world, equal opportunities do not make much sense unless it is ensured that they produce equal results. Last, manifestations of racism do not coexist with respect for diversity; I would argue that this makes challenging all forms of racism the most important aim of intercultural education. Osler and Starkey (2002, p. 147) argue for the importance of mainstreaming antiracism in education, as it is vital for 'promoting of equality, strengthening of democracy and encouraging respect for human dignity'. Racism will be the main issue I will be dealing with in the rest of this chapter, as it is the greatest obstacle of any attempt to promote equality.

Aguado and Malik (2001) also refer to intercultural communication and competency as another element of intercultural education. Delors (1996, p. 93) has argued that '[e]ncountering others through dialogue and debate is one of the tools needed by 21st century education'. Kymlicka (2003, p. 157) describes the application of such skills by the intercultural citizen, who is 'curious rather than fearful about other people and cultures; someone who is open to learning about other ways of life, and willing to consider how issues look from other people's point of view, rather than assuming that their inherited way of life or perspective is superior; someone who feels comfortable in interacting with people from other backgrounds, and so on'.

I would add two more notions to the above definition of intercultural education: cosmopolitanism and human rights. Appiah (2006, p. xv) refers to two strands of

cosmopolitanism: we have obligations to others, even if we are not related to them by kinship or citizenship; and, we take seriously the value of particular human lives and in the practices and beliefs involved. Osler and Starkey (2005, p. 24) suggest that citizens who are cosmopolitan 'have a sense of solidarity with those who are denied their full human rights, whether in local communities or in distant places'. Since cosmopolitan citizens are not born, but become so through education, it is education for cosmopolitan citizenship that is called to promote 'development of a global awareness, an understanding of and commitment to human rights, and opportunities to act with others to make a difference' (Osler & Starkey, 2005, p. 78). Similarly, acting with others to make a difference is crucial for the promotion of intercultural education principles – unless people cooperate, there is little chance of eliminating phenomena such as racism, human rights violations and discrimination.

When it comes to the aim of cosmopolitanism, Appiah (2006, p. 78) suggests that 'we should learn about people in other places, take an interest in their civilizations, their arguments, their errors, their achievements, not because that will bring us to an agreement, but because it will help us get used to one another. If that is the aim, then the fact that we have all these opportunities for disagreement about values need not put us off. Understanding one another may be hard; it can certainly be interesting. But it doesn't require that we come to agreement.'

Appiah's suggestion that there is no need to aim to full agreement between all groups of society on all subjects, but, instead, cosmopolitanism aims for understanding each other, avoids the huge weight off of educational or social attempts to reach unrealistic goals such as cultural homogeneity. Similarly, referring to intercultural education, Coulby (2006, p. 252) argues that it might be impossible for most people to fully understand cultures other than their own; however, '[i]t is the boldness of the aspiration to understand more than one culture and how they mutually inter-relate' that might characterize intercultural education, by asserting the necessity of such attempts, despite the difficulties in, or even the impossibility of, their realization. If 'the understanding of other people requires that one work on oneself in order to avoid lapsing into a projection and a game of mirrors or into a form of experimental tautology, where the teacher, consciously or otherwise, simply reproduces what already exists' as Abdallah-Pretceille (2006, p. 477) suggests, then it becomes obvious that the role of teachers in intercultural education is crucial.

Diversity and the Greek Cypriot Educational System

Cyprus, as a new member of the European Union, is expected to ascribe to further European norms in relation to human rights, antiracism and intercultural education. The Ministry of Education and Culture has already taken some measures towards the implementation of intercultural education, with an official policy being launched in 2001 with the Report 'Intercultural Education in Cyprus' (Roussou & Hadjiyianni-Yiangou, 2001). The intercultural education policy is mainly concerned with teaching Greek as a second language and with the 'celebration of difference' – a widely criticized approach (Coelho, 1998; Gaine, 1995, 2005; Massey, 1991; Pearce, 2005; Troyna & Hatcher, 1992). Such

approaches are known as '3Fs: Food, Festivals and Famous men' or '3Ss: Saris, Samosas and Steelbands' and may involve school concerts with music, dance, and traditional clothing of various cultures or the invitation of parents to cook 'ethnic foods'; these events are problematic because they highlight only the minority cultures and reinforce the assumption that the dominant culture is the 'normal' one (Coelho, 1998).

It is not surprising that the Commission for Educational Reform (2004a, p. 4) has concluded that: '[t]he ideological-political context of contemporary Cypriot education remains helleno-cyprio-centric, narrowly ethnocentric and culturally monolithic. The current ideological context ignores the interculturalism and multi-culturalism of Cypriot society, as well as the Europeanization and internationalization of Cypriot education.'

In relation to the teachers' role, the Commission (2004b) has reported that they are troubled about their abilities to respond to their duties, when working in diverse schools with traditional ethos. The teachers are concerned about the possible psychological problems of diverse pupils, whose cultures are neglected by the educational system, and about the intolerance that sometimes characterizes the relations between the Greek Cypriot and immigrant children (Commission for Educational Reform, 2004b). In order to face such issues, the Ministry (Nicolaides, 2005), the Commission for Educational Reform (2004b), and the European Commission against Racism and Intolerance (2006) suggest that the existing efforts in the field of intercultural education in Cyprus need to be emphasized and strengthened. The negative implications of monocultural and ethnocentric curricula and education systems include the production and reproduction of stereotypes, prejudices, racism and ethnocentrism (Coelho, 1998; Cushner, 1998; Parekh, 2006; Perotti, 1994).

At the same time, research emphasizes the nationalistic, ethnocentric, hellenocentric and monocultural character of the Greek Cypriot educational system. Trimikliniotis (2004, p. 1) argues that it reproduces discriminatory practices via an 'outmoded and ethnically divided educational model' and urges researchers and policy makers to work towards a comprehensive transformation of the educational system from an ethnocentric model towards 'a more critically oriented humanistic education based on tolerance and understanding'. Angelides, Stylianou, and Leigh (2003), carried out ethnographic work in a primary school classroom which confirmed the monocultural and monolinguistic framework in which the schools continue to function, despite the heterogeneity of the pupil population. The same authors argue elsewhere that the Cypriot educational system assimilates non-Greek Cypriot pupils into the Cypriot culture through the textbooks and the curriculum (Angelides, Stylianou, & Leigh, 2004).

Theophilides and Koutselini-Ioannides (1999) investigated the perceptions of student teachers at the University of Cyprus regarding the features and the identity of EU and the Mediterranean regions and concluded that prejudices against people from the African and Asian Mediterranean sub-regions are evident. The authors identify the need for a change in the teacher education curriculum, in order to cultivate the values of equality, openness and sensitivity to diversity.

In a study on the primary education of Pontians, Trimikliniotis (2001) concludes that even though teachers were keen on implementing multicultural education, the lack of appropriate training and teaching materials did not allow them to do so. He mentions that existing incidents of discrimination and racism between children or teachers and children are not properly monitored by any system, with the head-teachers of the schools denying the existence of racism at their schools. More recently, qualitative research in three highly diverse Greek Cypriot primary schools in the context of the European Dilemma Research Project XENOPHOB concluded that:

[i]n spite of the abundance of evidence of everyday "racial" discrimination, the vast majority of teachers and educationalist interviewed are either unaware or refused to admit it ... Systemic, institutional or structural racism seems to be deeply and routinely institutionalised to such an extent that it that has become part of *everyday normality*. Racism has thus been *normalized*. (Trimikliniotis, Papayiannis, & Christodoulou, 2004, p. 107, original emphasis)

Similarly, my previous research (Papamichael, 2006) identified the issue of colour blindness in teachers' attitudes towards diversity, which did not allow them to recognize and challenge racist incidents, even though they observed and described them. Also, while teachers emphasized that they treat all children in the same way, they often used discourse embedded with ethnic stereotypes, prejudices and cultural misunderstandings.

Other recent qualitative research on multicultural education in one diverse Greek Cypriot primary school (Panayiotopoulos & Nicolaidou, 2007, p. 76) concludes that 'educational practice in Greek Cypriot primary schools at the moment "treats the diversity of non-indigenous pupils as a type of deficiency ... that needs to be treated quickly so that children can be assimilated before they encounter even more difficulties with the curriculum". Panayiotopoulos and Nicolaidou (2007) point to the problems arising from the lack of common language between teachers and pupils and to the lack of clear guidelines for teaching diverse pupils by the Ministry; they consider that the Ministry's policy leads towards an acculturation model, which is mainly concerned with teaching Greek. They also emphasize the need for in-service teacher training on multicultural education. Racist incidents and bullying because of dress, financial status and skin colour became evident in the researchers' interviews with diverse pupils and parents, who seem to require psychological support (Panayiotopoulos and Nicolaidou, 2007).

Philippou (2005, p. 308), in her qualitative study of the construction of national and European identities of Greek Cypriot children, found that the pupils showed 'no multiculturally sophisticated understandings of "Cypriot" as inclusive of any other community of Cyprus, but was rather synonymous to Greek Cypriot, an understanding encouraged by the Hellenocentrism of the school context'. Spyrou (forthcoming) interviewed fifth and sixth Grade children and investigated their views of Sri Lancan and Filipino domestic workers. He found that children's understandings are filled with stereotypes, prejudices and ignorance, even if positive relationships are developed between them and the domestic workers. In relation to the attitudes of Greek Cypriot children towards Turks or Turkish Cypriots, it is made explicit how the nationalistic discourse of Greek Cypriot education and society essentializes identities and leads to the identification of Turks as the eternal enemy (Spyrou, 2000, 2001, 2002, 2006).

Spyrou (2004) carried out fieldwork in the five schools where most Turkish-speaking children (Turkish Cypriots, Roma, Kurds) attending Greek Cypriot schools are concentrated, in order to assess their educational needs. This study has identified a number of serious problems facing the Turkish-speaking community in relation to housing, unemployment and health; the children face specific problems at school because of the inappropriate curriculum (designed for Greek Cypriots only), lack of common language with teachers and classmates, prejudice and racism in the form of scapegoating, exclusion, name-calling and labelling. At the same time, the study points to some teachers' essentialized views of the Roma culture and to the very negative views that Greek Cypriot children and their parents have of the Turkish-speaking children; examples of cooperation, tolerance and acceptance were the exceptions. Further research on the education of the Turkish-speaking Roma children in Cyprus (Demetriou & Trimikliniotis, 2006) identified language barriers and the inadequacy of the curriculum and teacher education to recognize Roma culture and their contribution to society as factors which contribute to the Roma children's poor educational performance. At the same time, it located evidence of racial prejudice on behalf of Greek Cypriot parents and the educational system, leading to the segregation of schooling, despite the Ministry's policy on non-segregation. Demetriou and Trimikliniotis (2006) suggest that implementing intercultural education may eliminate the Roma children's educational underachievement and exclusion.

A Research Example

In the context described in the previous pages, I set out to investigate the implementation of intercultural education policy into practice through a qualitative study. My choice of qualitative methodology for the investigation of this matter was based on its advantages, which allow the researcher to explore people's everyday behaviour (Silverman, 2005). In-depth, qualitative interviewing provides the researcher with unexpected, rich data and a continually revised and reframed focus of the research project (Bryman, 2001). Quantitative research is preferred by the educational authorities in Cyprus (Angelides, 2001), as well as in other countries. Even though it is 'more manageable, easier to diffuse to a wide audience' and 'seemingly "objective"', quantitative research is unable to successfully explore complex issues such as inter-ethnic relations and racism (Troyna, 1991, p. 434).

In the next part I discuss data from unstructured interviews carried out with Greek Cypriot Headteachers and teachers in the context of a qualitative study of the policy and practice of intercultural education in two urban highly diverse primary schools. The research did not aim to compare between the schools or produce any generalizations for the whole population of Greek Cypriot teachers. It aimed to provide insights into the policy and everyday practice of intercultural education and produce hypotheses for future investigation. The participants commented on aspects related to intercultural education such as teacher training, the curriculum, and teaching resources and

discussed their everyday experiences of working in schools with children from a variety of backgrounds.

Discussion

While talking to me about the relations between the children at her school, Anna, Headmistress of School A, argued that Greek Cypriot children 'are not racist', based on their attitude towards a newly arrived Black child at the school:

Because it's been years that we have this *problem* here (the presence of non-Greek Cypriot children), our children accept the foreign children. I will mention the example of Abdul, who was of the Black race – his face. No child was disturbed in order to say 'Miss, this child is black' (...). They do not have racist, if you want, racist elements, because it's been years that we host *foreign* children as *guests* here (...). They accept them, they become friends with them.

The fact that the presence of a Black child in the school was not commented on in a direct way by the children is, according to Anna, evidence of the lack of racism in children's relations. However, studies of racism in young children's lives suggest that children entering primary school 'have already been exposed to racially constructed images of social relations' (Rizvi, 1993, p. 131). They are 'racially aware' from an early age (Wright, 1992, p. 50) and are able to appropriate, rework and reproduce discourses on 'race' and act as strategic agents (Connolly, 1998). A closer look into the terms Anna uses to describe the situation is in itself problematic. By referring to the presence of diverse pupils as a 'problem', Anna highlights the fact that diversity in Greek Cypriot schools at the moment is a problem for the teachers, because of the lack of sufficient training, the curriculum pressure and the inappropriate teaching resources for the education of diverse pupils. This characterization may also be reflecting the more general, xenophobic attitude in Greek Cypriot society which views the presence of 'foreigners' as a 'problem'. By referring to 'foreign' children as 'guests' at the school, Anna seems to consider migrant children as 'passers by', as people who are not here to stay. Furthermore, the attribution of the characterization 'of the Black race' to the newcomer child indicates the predominance of the view that human beings are classified into distinct races in everyday discourse.

Similarly, the majority of teachers denied that children may be aware of diversity. However, Antonia, a teacher at School B, while arguing that children are not aware of colour or ethnic differences at an earlier point in our conversation, acknowledges the possibility of the exclusion of non-Greek Cypriot pupils and the significance of the teacher's role in ensuring their acceptance by the others:

If she (the teacher) deals with this and discusses with the children and they understand that it is simply a child who comes from another country and you have nothing to fight about and you convince them that they can hang out and become friends, then the child will become integrated. If you don't, and you ignore the issue, the child will not be integrated (...). We explained and we talked that it's no big difference and that they simply come from another country and that 'if you went to that country you would seem very strange to them'. But they cannot understand this 100 per cent.

Antonia emphasizes that the teacher's interventions for the creation of a tolerant classroom ethos is crucial and requires a lot of time and energy. Greek Cypriot children appear to be very much aware of skin colour and cultural differences. This is why the teacher needs to make efforts to 'convince' them that they can actually become friends with their diverse classmates. Antonia also highlights the Greek Cypriot children's difficulty in dealing with diversity in general: they seem unable to fully comprehend that people all over the world are diverse in terms of appearance.

Some other teachers seemed troubled about the effect of racism in children's lives from the wider social context but still insisted there was no racism in their school. Christina, from the same school, recognizes the existence of racism in children's lives through the stereotypical representations of 'foreign' people in Greek Cypriot society. She argues that the non-Greek Cypriot pupils, especially the ones from non-European countries, experience racism in their social encounters in the neighbourhood. Christina talked to me about a Syrian boy she had in her class, who repeatedly explained his negative experiences of exclusion by his peers by saying 'Miss, it's all because I am foreign'. While she said that she never witnessed any racist incidents in her class, she was certain that racism was affecting this boy's life. Christina seemed more aware of the complexities of racism than most interviewees. She argued that intercultural education was 'urgently needed' as a response but said that it was 'not realized' at her school because of the lack of training and the curriculum pressure.

Most importantly, many of the teachers mentioned specific discrimination incidents or examples of racist name-calling they have witnessed; however, none of them characterized them as racist or challenged them directly. A striking example was Maria's comments – Headmistress at School B – on the relations among diverse and Greek Cypriot children, which seem to be dependent on physical appearance:

Our children many times see in a strange way a foreign child. But I believe that they like it. For example, I see – especially when it is children from the Eastern countries, with the beautiful, the blonde colour – I see children approaching it from the first moment and wanting to be friends with it, even if they can't communicate ... But sometimes, I happen to see children reacting in a negative way: not wanting to sit, for example, next to a Black child, not wanting a child from Asia, maybe he's a Kurd, maybe he's I don't know what else, Syrian, who has an intensely dark colour and has in him a bit of aggressiveness, a bit of wildness; they don't want to hang out with them. But this happens during the first time; afterwards they gradually get used to it (...) I have noticed that they (the Greek Cypriot pupils) react negatively more towards the dark children ... Towards some Kurds for example, they are a bit negative ... Maybe not in the classroom, maybe during break, when they express themselves more freely. Stereotyping on the basis of skin colour and appearance is evident in this part of our conversation with Maria. While she seems to aim for the creation of a friendly climate among all children of the school, her own attributes of 'beautiful' to the blonde, white children and of 'aggressive' and 'wild' to children with dark skin is problematic. Maria seems to find the Greek Cypriot children's preferences to blonde children justifiable on the basis of the stereotypes regarding both Black (see Hall, 1997) and White (see Dyer, 1997) people. She also acknowledges the possibility of the existence of racism when teachers are not present, during break time. However, the school has no antiracist policy and Maria only interferes in what she described as 'very negative' situations but did not elaborate.

In the same school, Zoe, the teacher of Sofia, a Black girl from an African mother and a Cypriot father, born and raised in Cyprus and speaking only Greek, talked about repeated racist name-calling incidents that she observes:

Z: Sofia is annoyed when Marios, a newly arrived child in the classroom, makes fun of her. He calls her 'black'.

E: And what do you, or Sofia, do?

Z: Well, I called him and I explained to him. Sofia comes and reports him but she doesn't seem to – at least the impression she gives is that – she doesn't care much because she has the love of the rest for granted. She is also a very confident child who doesn't seem to be bothered much. At the same time, she doesn't want him to continue calling her names and she reports him.

Zoe argues that the boy, known as 'having behaviour problems', 'finds an easy solution when he needs to get attention, to tease Sofia, by demeaning her and causing her problems'. Name-calling is one form of racialization of children's social relations, which may not always be expressive of the racist beliefs of the child (Hatcher, 1995). However, Zoe admits that she has no time to deal extensively with the issue, which would be necessary in order to investigate the boy's perceptions. She considers that because Sofia is a confident and popular child, the name-calling does not affect her at a great extent: 'they've accepted her, she's part of them'. However, friendship is not proof of absence of racism in children's lives, since children of the dominant culture who have ethnically diverse friends, or who do not use racist taunts, may still hold racist beliefs without expressing them (Hamilton, Rejtman-Bennett, & Roberts, 1999; Hatcher, 1995; Troyna & Hatcher, 1992).

Antonia, another teacher at Sofia's school, commented on an incident when another boy from her class repeatedly refused to hold hands with her during dance rehearsal:

He wouldn't touch her. But is it his fault? (...) Is it because he sees the colour and it looks strange to him or because his parents or his wider context speak in a degrading way about Black people? Maybe it's not like this, maybe it just looks strange to him that the girl is this way; it's not an unnatural thing (the boy's reaction), it's *very* strange for the Cypriot situation, she is *very* different, it's *very* hard to get used to her, you *can't* blame him.

Antonia here clearly acknowledges the existence of racism in the wider social context. However, the incident was treated as another misbehaviour incident on the part of the boy, one of the school's known 'trouble-makers'. I agree with Antonia in that the boy cannot be blamed; he, like the rest of the Greek-Cypriot children, has not been prepared to live in a multicultural society. Neither have the teachers, who find themselves in a complex and difficult situation: they have not been equipped to deal with and challenge racial stereotypes and prejudices or given the opportunity to reflect on their own assumptions and beliefs.

Conclusion

It becomes clear that the teachers play the most crucial role in the implementation of any aspect of intercultural education. While this may not be generalized to the total population of Greek Cypriot teachers, it seems that their views of diversity, their interpretations of children's relations, and their understandings of racism in the school and the Cypriot society are problematic. Ethnic and racial stereotypes, cultural misunderstandings and lack of preparation to work in highly diverse classrooms become obvious in the conversations with the teachers. Thus, it becomes difficult to expect the realization of the aims of intercultural education presented in the first part of this paper, without an investigation of the teachers' views of and attitudes towards diversity.

Initial and in-service teacher education may intervene and provide teachers with the tools to reflect on their own assumptions and attitudes and enable them to work in their classrooms to promote respect for diversity and human rights and challenge the various racisms. Further research, based on qualitative, ethnographic approaches, is necessary in order to both investigate and reach some understandings of the teachers' and children's views and experiences of working and living in diverse environments. The research presented in this paper is ongoing. It will continue to investigate the policy and practices of intercultural education in Cyprus, aiming to bring the teachers' experiences and concerns to the centre of the research agenda, and contribute to the development of policies and practices which aim at creating cosmopolitan citizens in highly diverse societies.

Biographical Note

Elena Papamichael holds a bachelor's degree in Primary Education (University of Cyprus, 2002) and a Master's in Education: Culture, Language and Identity (Goldsmiths College, University of London, 2006). She is currently pursuing a PhD at the Institute of Education, University of London under the supervision of Dr Hugh Starkey, in the area of intercultural education and teachers in primary schools of Cyprus. Her research interests include race and racism theories, nationalism, policies and practices of intercultural education, teacher education, and ethnographic research methods. She has worked as a primary school teacher in Cyprus, as a headteacher of Greek community schools in London, and as a research officer for the European INTERACT project,

and for the Teaching and Learning Templates project of the University of London. She worked as a Conference Officer for the 5th Pan Commonwealth Forum, organized by the University of London and the Commonwealth of Learning. She now teaches for the BEd programme at the Institute of Education, University of London.

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International Handbook of Research on Teachers and Teaching

Part Two

Editors

Lawrence J. Saha Australian National University, Australia

A. Gary Dworkin University of Houston, USA



Editors Lawrence J. Saha Australian National University Canberra, Australia lawrence.saha@anu.edu.au

A. Gary Dworkin University of Houston Houston, USA gdworkin@uh.edu

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Section 7

DIMENSIONS OF TEACHING

THREE SIDES OF TEACHING: STYLES, MODELS, AND DIVERSITY

Bruce Joyce and Emily Calhoun

Ms Bishop

We are a fly on the wall of a fifth grade classroom at the beginning of the school day, eight-thirty on the clock in this school where the opening bell sounds at eight forty-five. The students are entering, chatting with one another, watering the jungle of plants in the classroom, and putting words on a "flip" chart, new words that they have encountered in their individual reading. At about twenty minutes to nine the teacher, Ms Bishop, enters, smiling and making her way toward the desk in the circle of desks which is her home base. She is pulling a cat-carrier which contains an adult male and female and their six kittens – she breeds cats. These members of this little feline family have been feeling poorly and she has taken them to an early morning visit to the veterinarian.

One student sidles up to her with a question and she whispers something to him and sends him on an errand to the school office.

She reaches her desk, joined by a group of chatting girls. A bell rings and the morning announcements from the school secretary come from the PA system as the students find seats. After the announcements, one student turns on the hi fi system and they all stand and sing the national anthem.

Ms Bishop smiles broadly and asks. "Does anyone have anything to put on today's agenda. She nods toward another flip chart and says, "I have my usual heap." The students laugh and a hand goes up. Acknowledged, he says, "we haven't looked at the data on the house plants for a while."

"So we haven't" she says, and adds the item to the list of possible topics for the day.

Miss Anderson

Next door, Miss Anderson is at her desk in a corner of the room by 8:30. The students do not enter until 8:40, when Miss A. stands next to her desk while the kids enter quietly. After the announcements, she turns to the day's agenda, noting that "the main change from the usual is that grades four to eight will go to the multi-purpose room where a team from DARE will talk to us about drugs and how to avoid them."

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"Questions?"

"Let's begin with arithmetic. Take out your assignment from yesterday and take a few minutes looking it over. Come up if you are stuck on anything. We'll start comparing answers at about five 'til."

Both teachers are about 30 years of age and, since beginning as teachers about eight years ago, have developed and now manifest personal/professional styles that belong to their individual personalities and experiences.

Their styles are reflected in the learning environments experienced by their students. Teachers differ not only in the amount of warmth they radiate, the determination they manifest, and the extent to which routines are established, but the energy they expend in management and instruction. Some relate to the students easily, as if teaching is a natural, "falling off a log" phenomenon. Some are stiff and awkward with students, even after years of experience and apparent success in teaching (Joyce, Brown, & Peck, 1981).

From the students' perspective, differences in teaching styles can make a big difference in the quality and comfort of the thousands of hours they spend in classrooms. Depending on their schools and teachers, they go to school in environments filled with warmth and acceptance, or ones that are chilly and demanding, or ones that are warm and demanding or chilly and undemanding. Some styles radiate heaps of higher order questions and activities, pulling students toward conceptual development, whereas others pull students toward specifics. Some do each by turns. A complexity is that students are most comfortable with styles that match their own. For example, some students enjoy regimented environments, whereas others find them oppressive. HOWEVER, BOTH STUDENTS AND TEACHERS CAN LEARN AND ADAPT PRODUCTIVELY, REMODELLING THEIR STYLES TO ACCOMMODATE ONE ANOTHER. David Hunt's long series of studies uncovered both teachers and students who rigidly bumped their teaching and learning styles against each other and others who adapted nicely (Hunt, 1971).

BUT there are interesting effects in how the teachers judge students whose styles match or mismatch with their own.

For example, teachers differ in the proportions of students they believe to have attention deficit problems. Some rarely if ever refer a student as a candidate for AD. Possibly this is a matter of a clash of styles, one teacher affectionately seeing a wormy little boy where the other sees someone who cannot pay attention for dispositional reasons. Assigned grades for performance vary considerably from actual achievement and may be influenced by style differences. Re-enrollment in elective studies such as foreign languages varies considerably by teacher. Following the first course in, say French, taught by teachers with certain styles, very few students take a second course. In other courses taught by different teachers, most students enroll in a second course.

Let's take another peek at Ms Bishop and Miss Anderson.

At ten o'clock, Ms Bishop presents a set of sentences to her students.

"Wake up! Wake up!" Charlie tried to get his head under the pillow, but his 100lb Shepherd got her head under his and he knew it was hopeless.

The adult geese swam toward him, with their ten babies paddling along between them. The neighborhood reeked of danger. She hunched her coat over her shoulders and looked around her as she went past the decrepit church and into the

The school looked like a huge fort. He felt tiny as he reached for the front door. And, it didn't give.

Ms Bishop says, "Authors open passages in various ways, bringing us into the topic or theme or into the story. Classify these thirty examples – how have the authors opened? What have they done that we can use as we write?"

At ten fifteen,

Miss Anderson says to her class,

"Here is a set of openings that can help us understand how authors bring us into stories or help us get into the topics and themes of non-fiction." She passes them out and they read them together.

The set is the same one that Ms Bishop has presented to her students, with the first item being

"Wake up! Wake up!" Charlie tried to get his head under the pillow, but his 100lb Shepherd got her head under his and he knew it was hopeless. "Let's get to work. Read these very slowly, thinking about how the authors do their job of introducing a character. Take notes on the characteristics of these sentences. In about a half hour we will begin to share our notes and build a data set that we can categorize."

What is going on here? We find that two teachers of apparently very different styles have started units with very similar material and instructions to the students.

What has happened is that they are using the same model of teaching – the basic inductive model – where the students classify items from data sets. Both are teaching writing and emphasizing the reading-writing connection using concept-development models. The styles they have developed will color the model, while the model influences the moves of teaching that induce the students to build categories and experiment with them in their own writing. The styles and this or any other model interact to create the learning environment.

Learned Styles of Teaching

In every domain styles are learned from others or are self-taught patterns of thinking and interacting with others. Models are developed patterns that have been submitted to research and development. They are the technical base for a vocation. Everyone develops distinct styles – patterns that are fairly consistent and are recognizable as the possession of the individual practitioner's repertoire. That repertoire can be enhanced through the study of developed models. As an aside, there are some difficulties that arise when discussing teaching styles and models of teaching because many educators do not like words like "technical" and there is no language for describing styles that has general acceptance throughout the education profession.

The Style of the Profession: The Styles of Individuals

By acculturation we mean the induction into the society of educators and their occupational subculture. Through acculturation teachers acquire stylistic behaviors that are not unique to them as individuals but are shared as the culture of educators is learned and activated in practice.

The process of acculturation begins long before preservice teacher education, student teaching, or employment as a teacher, simply because, as children, teacher candidates experienced schooling. They experienced how their teachers taught them, how those teachers interacted with one another and site administrators, and how they related to parents, including their own. Those parents – their parents – and other members of their families and communities are not loathe to express their opinions about how schooling should be conducted. Most of those opinions are conservative, emphasizing basic information and skills taught in a direct fashion.

The Recitation Pattern

In terms of how to teach, all the dimensions of the acculturation process pull the new teacher toward the practice dominated by the Recitation pattern.

Essentially, the student is given a task, generally something to study, and then is questioned about mastery. Instructional materials are integral to the practice. Often the teacher follows packages of instructional materials in a curriculum area. The students are to study the materials and be questioned over what they study. Research on how teachers plan have indicated that most teachers plan by studying the packages of materials, preparing to lead the next lesson or series of lessons (Clark and Yinger, 1979; Clark & Peterson, 1986).

Apprenticeships (student teaching or internship and mentoring), reify the recitation by modeling and creating the impression that education is a mature field, one with well-grounded practices. Teachers are both socialized to use the recitation and told that it is based on experience and research (Sirotnik, 1983). As part of the socialization, educational theory is deprecated and a "practicality ethic" is emphasized – that teaching practice that "works" is to be prized, but that general theory is of little value.

From the ranks of teachers, principals are selected who have been socialized to the same norms. And, from their ranks, central office personnel are selected. The culture is not just one of teachers, but the entire organization.

Thus, if you are an actual "fly-on-the-wall" in a classroom, you can see the results of acculturation – that the styles of many teachers, supported by principals and central office personnel, have many features in common. Most practice the recitation, moderated by their personal styles that overlay the normative practices.

Policymakers can follow their preferences, too. The controversial administration of the No Child Left Behind federal initiative clearly were following their style preferences rather than research. The administrators pushed item-by-item synthetic phonics as the national strategy for teaching reading, although their own studies had indicated that analytic and analogic phonics worked just as well (see Ehri, L., Nunes, S., Stahl, S., & Willows, D., 2001).

Variance: Dispositional Differences

Individuals bring their personalities to teaching and styles emanate from those personalities. Recent research on the personalities confirm the considerable amounts of research from twenty years ago that confirmed what common sense tells us. Essentially, people come to teaching with different degrees of warmth, sociability, academic learning, and conceptual development and we can see all these in stylistic variations.

Warmth

Many years ago a set of studies indicated that teachers vary in the informal ways they express warmth toward their students. Some folks take every opportunity to express positive affect toward their students and do so consistently. They say, "good job" regularly in various ways. They give students an extra pat or positive murmur when they are near them (see Joyce et al., 1981).

Gregariousness/Sociability

Similarly, teachers differ in the extent to which they reach out to other people, and reaching out to their students is no exception. Some folks just naturally involve others – asking "how shall we do this?" while other simply tell the students what they want. Some look for opportunities to interact with students as they do with adults, while others are reticent, content to be with others without being proactive.

Academic Learning

A startling study by Vance and Schlecty (1982) indicated that many teacher candidates teachers are in the lowest brackets of their college classmates academically and only a few are in the highest brackets. These differences affect style in teaching – those who have struggled as a learner see learning as a struggle and conduct the classroom accordingly. As an example, they are less likely to provide higher-order and open-ended tasks compared to their more confident colleagues.

Conceptual Level

How teachers process information affects how they conduct the management of information in the classroom. Teachers who develop complex networks of concepts tend to invite their students to do so, asking "higher order" questions, providing inquiry-oriented learning tasks, and asking students to reflect on the concepts that are being learned. Teachers who operate from simpler, linear structures tend to ask "lower order" questions and to provide tasks requiring the memorization of information and rote practice of skills (Hunt, 1971).

Thus, although the culture of educators tends to press teachers into the recitation styles, individual differences generate a variety that has a considerable impact on how students are taught to learn.

The Attitudinal Dimension

Teachers develop attitudes toward students, teaching, and their workplace, and those attitudes are radiated toward students, parents, and colleagues. Here, again, acculturation plays a role, but individual differences are significant. The cultural press emphasizes that student learning ability depends greatly on the genetic makeup of parents and the parenting styles that they use with their children. Teachers are "taught" to believe that socioeconomic status is a relentless force affecting what students will learn. However, some teachers have a sunny, optimistic view that overrides the norm. Operationally, this can be seen in referrals for behavioral problems and having students assessed for the possibility of learning disabilities. As we indicated earlier, referrals related to the possibility of ADHD are an example. Some teachers NEVER make such a referral. They relate to the students in such a way that ADHD-type behaviors simply do not occur in their classrooms. Some teachers refer a considerable proportion of their students. Attitudes, acted out in styles of teaching, have a considerable influence on student behavior and prospects for the future.

Teaching Styles and Ability to Learn: The First Field of Staff Development

Do developed teaching styles restrict teachers' ability to learn models of teaching new to them? The shape of the entire field of staff development depends on the answer to this question. If it turned out that teachers could only learn to use models adjacent to their repertoire, then staff development organizers would have to set up arrays of offerings that catered to the comfort levels of teachers of various orientations and naturally-developed styles. And school improvement centered on curriculum initiatives would be very difficult because, first, most such initiatives use models other than the recitation and, second, making common cause among folks with idiosyncratic styles and their underlying cognitions would be extraordinarily difficult.

Three lines of research have examined the question of how effectively teachers can learn to use, strongly, approaches to teaching that are different from their naturallyacquired styles.

The first line was concentrated in the 1960s and 70s in preservice teacher education and explored whether teacher candidates could master a repertoire of models of teaching. Those studies indicated that nearly all the teacher candidates could do so regardless of initial teaching styles.

Conceptual level affected the mastery in a stylistic way, but did not prevent the teachers from adding to their repertoire (Joyce et al., 1981; Joyce, Weil, & Wald, 1981).

The second line, pursued a little later – from the 1970s to the 1990s – focused on experienced teachers and explored whether THEY could expand their repertoires. There were two yields. First, they COULD. In addition a better understanding of how teachers learn emerged (see Joyce & Showers, 2002). And a paradigm for staff development was generated. It combined the study of theory with demonstrations, and preparation for practice to develop the skill to implement the new content (various models of teaching). However, full mastery required practice over time that was facilitated by organizing the teachers into small groups who studied together and shared experiences as they implemented the new items in their repertoire. This organization, commonly called "peer coaching" resulted in implementation but rarely inhibited the acquisition of the new repertoire at a reasonable level of skill. As in the case of the novice teachers, Conceptual Level affected ease and richness of implementation.

The third kind of study has been part of school and district-wide school improvement programs where large numbers of teachers have studied what are, for them, new models of teaching and implementation and effects on student learning have been studied. Essentially, the evidence collected is whether nearly all the members of a district faculty can master one or more new models of teaching to the extent that student learning occurs. If they can, then teaching style has probably not inhibited the ability of the teachers to add to their repertoires except to color the implementation with their individual styles (see Joyce, Hrycauk, Calhoun, & Hrycauk, 2006; Joyce & Wolf, 2008).

In Summary

From our perspective, styles and models are equally important. The rich panoply of individual differences enriches the education of our children. The continued socialization to the recitation is not as healthy. When studies of models of teaching compare students taught with various models with students taught with the recitation, the recitation invariably loses. Preservice teacher education should be much concerned about that.

And, so should staff development. Much of the content of current staff development is concerned with polishing the recitation – it is within-repertoire-oriented rather than constructed to expand the repertoire. Not good.

Biographical Notes

Bruce Joyce has served at Teachers College, Columbia University and The University of Chicago as director of Elementary Teacher Education. He has conducted research on instruction, conceptual level, staff development, and school improvement and published on those topics.

Emily Calhoun is the Director of The Phoenix Alliance, which provides long-term support to school districts and state/regional agencies that are committed to improving student achievement through investing in staff learning. Her major work is helping responsible parties study the effects of curriculum and instruction

on student learning and strengthen the learning environment for all. Emily's special research interests include literacy development at all levels and the use of action research for individual and organizational development.

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CREATING PRODUCTIVE LEARNING ENVIRONMENTS IN CULTURALLY PLURALISTIC CLASSROOMS

Revathy Kumar and Stuart A. Karabenick

Introduction

Recent technological advances and changing economic conditions have prompted significant population shifts from developing countries in Latin America, Asia, Africa and the Middle East to Western nations – including the United States. The receiving nations' resultant increase in demographic heterogeneity has raised serious concerns regarding how such immigration affects the schools and institutions of higher education, since it is these institutions that face the challenging task of preparing individuals to adapt to more culturally and socially complex societies (Cushner, 1998). In this chapter we examine the current status of multicultural education – a response of Western countries in general, and of the United States in particular – to meeting the needs of culturally diverse student populations. We then draw on social identity theory as a framework for understanding inter-group interactions in schools. Finally, we examine achievement goal theory, a social cognitive approach to motivation, which suggests ways to transform school and classroom cultures so that they promote inter-group harmony and support the learning and development of *all* students.

We begin by acknowledging that, due to their unique social, cultural and economic circumstances, countries differ in their respective conceptions of cultural diversity. In western European countries, for example, recent trends toward cultural diversity stem largely from major immigrations from Asian, African, and Micronesian countries that had been colonized by Europeans. Diversity in the United States, however, stems from a blend of indigenous populations and immigrants, voluntary and involuntary, from around the world. In European countries, cultural differences are understood mostly in terms of language and religion; in the United States and United Kingdom, cultural differences are understood primarily in terms of race. Furthermore, unlike European countries, in which immigrants represent but a small percentage of the total population, the United States' population consists predominantly of immigrants (Eldering, 1996).

This population difference may account for multicultural education's relatively long history and strong emphasis in the United States, as compared to

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several European countries. Spain (Ciges & Lopez, 1998) and Romania (Neumann, 1998), for example, demonstrate little interest in multicultural education, due the relative homogeneity of their student populations. In many other schools and classrooms across Europe, multicultural education is often "reactive education" (Eldering, 1996). In the Netherlands, for example, multicultural education focuses primarily on helping ethnic minority students adjust to the mainstream society (Eldering, 1996). Indeed, though the Netherlands is becoming an increasingly multicultural society, only recently have researchers begun to examine interethnic and intercultural classroom contexts and conflicts and how these are - or should be - addressed by teachers (Hooghoof & Delnoy, 1998; Verkuten, 2005). Danish approaches to multicultural education have evolved somewhat differently than in other European countries. In response to an increase in the ethnic minority student population, the Danish school system has initiated and evaluated an ambitious program to integrate multicultural education into mainstream education. The program has met with some "ambivalence" as both the nation and the student population become more heterogeneous (Horst & Holman, 2006). In view of the considerable variability in the ideological and theoretical interpretations and the intensity of implementing multicultural education in schools and colleges among the Western nations, we describe the theoretical and empirical advances made in the United States to address issues related to cultural pluralism in schools and colleges.

During the last several decades, the United States has made a concerted effort to address cultural diversity in its schools and classrooms. Multicultural education in the United States had its beginnings in psychological studies of racial attitudes and intergroup contact conducted in the 1940s and 1950s (Agnes, 1947; Allport, 1954; Jackson, 1944). The first large-scale efforts to accommodate diversity in educational institutions began in the 1960s and 1970s and arose from the need to overcome the systemic injustice and inequity that African Americans and other oppressed minority groups suffered.

In the intervening years, numerous researchers – among them Banks (2002), Cochran-Smith (1995), Darling-Hammond (2001, 2006), Delpit (1990, 2006), Gay (1971), Grant (1978), Ladson-Billings (1994, 1995), Nieto (1996), and Sleeter (2001b) - have advanced knowledge of multicultural education and raised awareness about the need for a multicultural approach to education. More recently the American Psychologist (the journal of the American Psychological Association), in an effort to emphasize the importance of multicultural education, published guidelines governing multicultural education, training, research, and practice for psychologists (American Psychological Association, 2003). These guidelines urge psychologists and educators to recognize the importance of knowledge about and sensitivity to the ethnically and racially different individuals with whom they work and interact. The guidelines also encourage educators to approach teaching from multiple perspectives and to employ different learning models in practice. To this end, we use this chapter to integrate results from three areas of research: multicultural education, social identity and stereotyping, and achievement goal theory. We then focus on how teachers can restructure the learning environment to promote positive inter-group relationships among students and advance the education of all students.
Philosophies and Goals of Multicultural Education in the United States

Multicultural education in the U.S. began with the goal of assimilating people of color into mainstream society. Initial approaches required members of minority groups to suppress their marginalized cultural identity and way of life, adopting instead the values and beliefs of the majority mainstream society. By contrast, recent efforts have emphasized the importance of moving beyond simplistic understandings of multicultural education toward a more complex social reconstructionist perspective (Sleeter & Grant, 1987). Multicultural education from this perspective endeavors to uphold social justice and to enable individuals to function effectively in culturally diverse societies. Emphasis is placed on equality of educational opportunity, encouragement of human dignity, and respect for group differences in culturally pluralistic societies. This perspective takes into account the need to prepare students "to work actively in groups and individually, to deal constructively with social problems, and to take charge of their own futures" (Gollnick, 1993, p. 223).

The social reconstructionist approach to multicultural education calls for major school policy reform that will promote equity among students (Banks & Banks, 1997). It urges schools to dismantle policies and practices promoting inequality – such as tracking and ability grouping – and replace them with policies and practices that empower students to acquire the knowledge and skills necessary to function effectively. This, according to Banks (1997), requires integration of multicultural curricula into all subject areas, an understanding among teachers that all knowledge is culturally constructed (and thus necessitates the adoption of culturally relevant pedagogical approaches), and the reduction of prejudice and improvement of inter-group relationships in the learning context.

Multicultural Education in Schools: Theory into Practice

Contemporary references to multicultural education equate it with human relations, sensitivity training, ethnic holidays, and food festivals (Cochran-Smith, 1995; Ladson-Billings, 1993). Multicultural programs used in primary and secondary schools range in duration and depth, from 2-week programs to those that permeate every aspect of students' school experiences (Stephan & Stephan, 2001). Most programs present information about the history and practices of different racial, ethnic, cultural, and religious groups, and include such activities as readings, discussions, videos and movies. Programs also address the thorny issues of racism, prejudice, stereotyping, discrimination, and ethnocentrism. In their analysis of elementary and secondary school program content, Stephan and Stephan (2001) report that many multicultural education programs effectively reduce ignorance about other cultural groups, foster humanitarian values, arouse empathy, and promote positive inter-group contact under favorable conditions. However, no extant studies have analyzed the long-term societal effects of comprehensive multicultural educational programs.

Many schools treat multicultural education much like another class; a school's multicultural teacher travels from class to class much like a music or art teacher.

This practice can create a schism between regular and multicultural curricula. Moreover, while this practice may enhance students' knowledge about different cultural groups, it may do little to change their long-term attitudes towards people whom they perceive as different or to change their inter-group school relationships.

Indeed, multicultural education programs that function primarily as an intellectual exercise are unlikely to promote inter-group socialization. Unless carefully conducted, they may even exacerbate inter-group bias. Tajfel and his associates (Tajfel, 1978; Tajfel & Turner, 1986) suggest that when individual group membership and identity are made salient, students tend to favor their own group and discriminate against the out-group. Thus multicultural programs may inadvertently increase out-group bias by inviting comparisons that present a particular group in a favorable light. Wittig and Molina (2000) describe one such well-intentioned, 8-h program for middle school students that provided historical information about various racial and ethnic groups. It also detailed contributions each group made toward the betterment of mankind. College students assisted in program delivery by providing cultural awareness training. Contrary to the researchers' expectations, they found that students developed greater bias toward other racial groups after participating in the program and that the interracial classroom climate actually deteriorated.

Evidence indicates that in racially and ethnically mixed schools, patterns of student interaction (Tatum, 2003), and students' consequent *inclusion/exclusion* based on racial and religious group memberships (Dodge et al., 2003; Graham & Juvonen, 2002; Ladd, 1990) mirror those of society. This holds true not only in schools with a majority White population and a minority African American population. Even when three or more cultural groups are present in the school, most friendships remain segregated along ethnic lines (Kumar, 2003). Further, common educational practices – such as categorizing students based on standardized test scores – designed to increase academic homogeneity tend to re-segregate classrooms (Oakes, 2005) and curtail opportunities for positive inter-group interactions. This suggests the need to alter school policies and provide pre-service and in-service teachers the knowledge, experience, and tools necessary to transform classroom practices.

Multicultural Education Programs for Preservice Teachers

Considerable evidence demonstrates that pre-service teachers bring very little cross-cultural background, knowledge, or experience to their training. In fact, they tend to retain stereotypic beliefs about children from cultural, ethnic, or socioeconomic minority groups (Barry & Lechner, 1995; Darling-Hammond, 2006; Gilbert, 1995; King, 1997; Larke, 1990; Law & Lane, 1987; McIntyre, 1997; Smith, Moallem, & Sherrill, 1997; Sleeter, 1985, 2001b; Su, 1996, 1997; Valli, 1995). Despite professional training, pre-service teachers continue into the profession with a limited view of multicultural education and a lack of preparedness for teaching diverse classroom populations (Goodwin, 1994). Even more disturbing is the lack of concern some pre-service teachers demonstrate regarding their lack of preparation to teach in culturally pluralistic classrooms (Avery & Walker, 1993; Sleeter, 2001b). In a detailed review of 80 qualitative and quantitative studies about the education of pre-service

teachers, Sleeter (2001a) found that most extant research addresses attitudes and lack of knowledge about multicultural education among White pre-service teachers. Sleeter concludes that "it is difficult to say how much impact multicultural education courses have on White students....Almost none of the studies above examined the impact of multicultural education coursework on how pre-service students actually teach children in the classroom" (p. 99). Further, one study that examined the effect of didactic presentations about various groups found that such presentations actually engendered stereotypes and generalizations and did little to change the beliefs of pre-service students (McDiarmid, 1992).

Multicultural education for pre-service teachers in the United States has evolved over time. Prior to the 1960s, multicultural education was virtually absent from teacher education curricula. However, during the 1970s, increased awareness that teachers must be prepared to work with culturally and ethnically diverse students led to the development of special courses and workshops for pre- and in-service teachers (Banks, 1997). Initially these were not well integrated into the regular preparation programs. However, the current emphasis is to infuse multicultural education into every phase and aspect of pre-service teacher education. This is exemplified in the 2006 revisions of the National Council for Accreditation of Teacher Education (NCATE) guidelines, which include stronger language regarding multicultural pedagogy. The guidelines urge the deliberate articulation of multicultural values into all the standards that define quality teaching; a focus on the ideals of fairness; the utilization of teaching and learning strategies that permit all students to learn; and the application of knowledge as it relates to students, families, and communities (2006, http://www.ncate.org/documents/Standards/May06_revision/2ndDraftRevise dUnitStds06.doc). All of these aims attest to the urgency of meeting the educational and psychosocial needs of an increasingly diverse student population.

Such ideas are certainly not novel. As early as 1977, Geneva Gay, a prominent multicultural education scholar, developed a model for educating prospective teachers. The model included three components for multicultural education: *knowledge*, whereby "teachers become literate about ethnic group experiences" (p. 34); *attitudes* "to help teachers examine their existing attitudes and feelings towards ethnic, racial, and cultural differences" (p. 43); and *skills* "to translate their knowledge and sensitivities into school programs, curricular designs, and classroom instructional practices" (p. 48). Unfortunately – despite Gay's suggestions and the additional efforts of others to regulate teacher education programs so that pre-service teachers are prepared to serve in culturally pluralistic classrooms – it is unclear how successful pre-service teacher programs have been (Sleeter, 2001a; 2001b), or how many programs substantively address the need to prepare teachers for multicultural classrooms (Melnick & Zeichner, 1997).

Recent evidence does suggest, however, that more emphasis is being placed on enhancing the knowledge and changing the attitudes of pre-service teachers (Sleeter, 2001b). Scholars have also begun to discuss the importance of studying other cultures and interacting with students in a more effective and humane fashion. For example, they emphasize the necessity of incorporating students' language and culture into the educational process and encourage teachers to consider the learning styles of students from different cultural groups (Nieto, 1996). While in no way minimizing the importance of these advances, we believe that too little emphasis is given to educating prospective teachers regarding critical *features* of the classroom and school context that would likely promote positive inter-group relations and benefit all students. Further, we observe that, though the cultural disparity that exists between teachers and students is bemoaned (Sleeter, 2001a), there is relatively little discussion about inter-student disparities in schools and classrooms, how these might affect inter-group interactions and, ultimately, how they might affect the learning and development of students. That this is an important issue to be addressed in multicultural classrooms is attested by the recent modifications to the NCATE standards for teacher education noted earlier. In comparison with prior versions, this revision places a much stronger emphasis on teaching pre-service teachers how to foster a classroom and school climate in which diversity is valued.

Further, as Banks and Banks (1995) observes, schools are cultural systems with specific set of values, norms, and shared meanings. Therefore, we should take a systems approach to reforming schools, one that addresses the meaning and purpose of schooling and education for students of all backgrounds. Before embarking on such overreaching, but necessary, reform, we should have a careful understanding of the framework that undergirds it and the steps toward it. This raises an important question: Within what framework can we transform schools, and how can we transform school and classroom cultures so that students are encouraged to interact positively with one another and all feel they belong to a community of learners?

Learning Contexts that Promote Multiculturalism

We address this question by first examining the role of social identity and inter-group contact on students' inter-group school relationships. We then draw on achievement goal theory to suggest ways in which culturally pluralistic schools and classrooms can be structured to support positive inter-group relationships and enhance learning and performance.

Social Identity and Intergroup Relationships in School

Social identity theory focuses on the nature of social group membership and its evaluative and emotional significance (Tajfel, 1978; Tajfel & Turner, 1986). The term *social identity*, as defined by Tajfel (1981), refers to "that part of the individual's self-concept which derives from his knowledge of his membership to the social group (or groups) together with the value and emotional significance attached to that group membership" (p. 255). This theory proposes that individuals strive for positive social identity via both social categorization and comparison between in- and out-group members (Hogg, 2003; Turner, 1982). Inter-group comparisons leading to positive distinctiveness of one's in-group elevates self-esteem (Abrams & Hogg, 1990; Crocker & Luthanen, 1990; Tajfel & Turner, 1979; 1986). Unfortunately, however, this may not be a viable option for some adolescents living in culturally pluralistic

societies in which social stereotyping and prejudice involve groups of unequal status (Montreuil & Bourhis, 2001; Phinney, Horenczyk, Leibkind, & Vedder, 2001; Ward, Bochner, & Furnham, 2001).

Many societies do not afford low-status minority group members a positive social identity. In heterogeneous countries such as the United States, this is especially true of those low-status minority individuals who are distinct from others (especially others in dominant groups) because of physical and cultural characteristics. Such individuals are held in low esteem and develop a sense of group consciousness that incorporates an awareness of social isolation, stigmatization, persecution, and discrimination by the larger society (Jaret, 1995). Thus, social identity may contribute to a sense of belonging among adolescents in the dominant cultural group, whereas the social identity of those from immigrant and minority communities, who are held in low regard by the dominant culture, may contribute to fears of isolation and alienation in the school context. This is particularly true when social identity in the school is highly salient (Ethier & Deaux, 1994) and boundaries between social group and dominant out-group are perceived as impermeable and stable (Bettencourt, Dorr, Charlton, & Hume, 2001). This conclusion is supported by studies suggesting that acculturation patterns and the integration of immigrants into mainstream society are bidirectional, dependent on the acculturation orientation of mainstream society toward the immigrant group and the acculturation orientation of the immigrant group regarding adaptation to the mainstream culture (Berry, Phinney, Sam, & Vedder, 2006; Bourhis, Moise, Perreault, & Senecal, 1997).

Adolescents' capacity to think about groups and relationships among them coincides with the strong need to experience a sense of belonging and the fear of social alienation and exclusion (Newman & Newman, 2001). Fear of exclusion based on group membership is well founded, as demonstrated by the fact that patterns of adolescent interaction in schools (Tatum, 2003), and adolescents' consequent *inclusion/exclusion* based on racial and religious group memberships, mirror those of society (Dodge et al., 2003; Graham & Juvonen, 2002; Ladd, 1990). Exclusion and rejection consistently produce negative socioemotional outcomes such as aggression, self-defeating behavior (Twenge, Catanese, & Baumeister, 2002), low self-esteem, and decrements in cognitive functioning (Baumeister, Twenge, & Nuss, 2002). Furthermore, exclusion and stigmatization compromise adolescents' school adjustment and create a reactive "negative identity" that often results in the use of maladaptive coping strategies (Spencer, 1999).

Intergroup Contact Hypothesis: Setting the Stage for Positive Intergroup Relationships Among Students

Social identity theory proposes that conflict, prejudice, and discrimination are inevitable outcomes of intercultural contact. Research on inter-group contact, however, demonstrates that contact can ameliorate prejudice and promote inclusion if certain *prerequisite* conditions for inter-group interactions are met (Allport, 1954; Dovidio, Gaertner, Kawakami, 2003; Nesdale & Todd, 2000; Pettigrew, 1998; Pettigrew & Troop, 2006). As originally specified by Allport (1954), these conditions include equal status

among groups in the contact situation, inter-group cooperation, pursuit of common goals, and a broader social climate that supports inter-group contact. Two other factors identified as crucial for effective inter-group contact include personal acquaintance between members (Amir, 1976) and development of inter-group friendships (Pettigrew, 1997, 1998). Under these conditions, inter-group contact can reduce inter-group bias (Pettigrew & Troop, 2006). However, as Dovidio et al. (2003) observe, questions remain regarding features of the contact situation necessary to reduce bias and promote positive relationships. Further, the process of translating those facilitative contact conditions for inter-group interactions identified in laboratory experiments into everyday interactions that characterize inter-group encounters remains complex (Dixon, Durrheim, & Tredoux, 2005). Interventions such as jigsaw classrooms and cooperative learning (Aronson & Patnoe, 1997) based on the inter-group contact hypothesis have proven effective in improving inter-group relationships. However, the benefits of such intervention depend on the presence of supportive classroom practices (Webb & Mastergeorge, 2003; Webb, Nemer, Kersting, & Ing, 2004).

Though the contact hypothesis outlines the prerequisites necessary for positive inter-group contact, it does not prescribe steps for transforming school cultures so that they meet these conditions. For such instruction, we turn to achievement goal theory, a social cognitive theory of motivation that conceptualizes the relationships between school learning environments and students' motivational, emotional, and academic well-being. Through this lens we examine the social and academic features of school and classroom practices that may contribute to or detract from optimal inter-group contact conditions.

Supportive and Unsupportive Learning Environments: An Achievement Goal Theory Perspective

Research emerging from the achievement goal theory framework specifies conditions likely to create supportive learning environments, promote learning, and encourage cooperation and positive inter-group interactions. Specifically, Maehr and Midgley (1991, 1996) delineate how mastery-focused (i.e., mastery goals – an emphasis on learning and individual improvement) and performance-focused (i.e., performance goals – an emphasis on ability and interpersonal comparisons) classrooms and schools influence the extent to which students perceive learning environments as validating, empowering, and inclusive. Research indicates that mastery-focused classrooms and schools are associated with positive student outcomes, whereas less adaptive student outcomes are more likely in classrooms and schools that are more performance-focused (Ames & Archer, 1988; Anderman & Maehr, 1994; Anderman, 1999; Kaplan & Maehr, 1999; Meece, Anderman, & Anderman, 2006; Kaplan, Middleton, Urdan, & Midgley, 2001; Kumar, 2006).

Students who perceive that their learning environment emphasizes performance goals experience heightened self-consciousness (Roeser, Midgley, & Urdan, 1996) and poor self-image (Eccles & Midgley, 1989). Social comparisons and evaluations in such school contexts increase students' awareness of who they are compared with

and who they ought to be, resulting in anxiety and depression (Higgins, 1987). Evidence also indicates that performance-focused conditions cause students to question their ability, or the ability of their social group, thereby evoking schemas, or stereotypes, about the group (Steele, 1997) and, especially under performance-evaluative conditions, exacerbating feelings of disengagement and home-school cultural dissonance (Kumar, Gheen, & Kaplan, 2002).

By contrast, a mastery-focused emphasis on the benefits of learning as a shared experience, in which other learners are considered important resources for assistance and information rather than competitors to be avoided (Karabenick, 1998, 2003, 2004; Karabenick & Newman, 2006), leads to more adaptive learning outcomes. Conditions such as equal status between groups and absence of interpersonal competition tend to promote positive inter-group contact (Dixon et al., 2005), and mastery-focused learning environments are designed to create such a learning context. The mastery-focused emphasis on student collaboration in a mutually respectful environment is thus likely to foster a sense of inclusion rather than exacerbate the potential for exclusion. It may also encourage adolescents to view their peers in terms of meaningful personal categories (e.g., interests, feelings, similarity of attitudes) that transcend cultural boundaries.

Accordingly, the dissolution of perceived dissimilarities is more likely to encourage the formation of inter-group friendships and acquaintances which, as the contact hypothesis suggests, has the potential to reduce inter-group prejudice. Research suggests that adolescent students are less likely to differentiate themselves from school peers or experience stress due to differences between home and school cultures, and more likely to experience an enhanced sense of belonging, in schools where teachers report an emphasis on mastery rather than performance goals (Kumar, 2006). Thus, mastery-focused academic environments have the potential to more closely approximate contact hypothesis prerequisites for promoting positive inter-group relationships among students from mainstream and immigrant minority cultural groups. This is because, in a mastery-focused school environment, success is defined in self-referenced standards rather than through normative comparisons. Success in such an environment is defined in terms of improvement, innovation, mastery, and creativity, where students are encouraged to engage in tasks that are personally satisfying and challenging rather than demonstrating one's self worth and ability to others rather than establishing performance hierarchies (Ames, 1992; Maehr & Midgley, 1996). In essence, schools and classrooms structured in this manner can become powerful sources of validating and empowering students from culturally diverse backgrounds.

Implications for International Education

Those countries hoping to foster a successful, culturally pluralistic society need to populate schools with teachers who possess the pedagogical knowledge and attitudes required to teach culturally diverse student samples. They must be familiar with both immigrant and indigenous students – and with their parents and their family cultures – to help increase understanding and avoid detrimental, culturally based misinterpretations (Moosa, Karabenick, & Adams, 2001). Teachers and school personnel must also develop the expertise and competence required to create favorable conditions for learning: minimizing inter-group comparisons and counteracting the effects of inter-group beliefs and stereotypes that may exist in the larger society. We have proposed the importance of establishing learning contexts that, as substantial research indicates, are more likely to result in beneficial academic and social outcomes for all students – but, more urgently, for those who may be stigmatized by virtue of social, cultural, or linguistic status, or for almost any differentiating marker (Tajfel & Turner, 1986).

This approach does not imply that all interpersonal comparisons are detrimental. The essence of this approach hinges on creating tasks, incentives, group activities, evaluations, and social conditions that focus students on individual improvement and mastery and that minimize concerns about ability that results from *individual comparisons and competition*. Cultivating a mastery-focused environment does not require teacher and school personnel to sacrifice a commitment to high standards (Horst & Holman, 2006) but to realistically acknowledge the added variation required during preparation for teaching and in multicultural classrooms and schools.

Concluding Remarks

In this chapter we have attempted to draw from three theoretical approaches to gain a comprehensive understanding of the issues underlying the education of culturally diverse students. Social identity theory and inter-group contact hypothesis offer insight regarding the problems that non-mainstream students face in schools and classrooms, as identified by multicultural scholars. Achievement goal theory takes this issue a step further to explore the transformations needed in school and classroom cultures to create a community of learners.

We conclude by quoting from an earlier work by Kumar that "most of us are so tightly encapsulated within our chosen discipline and area of research that we fail to incorporate relevant and important work of colleagues with different philosophical underpinnings, perspectives, and approaches to an issue. Further, if schools are to implement reforms and improvements, educationists and researchers must reach a broader understanding and agreement on what reforms will best serve the needs of all students" (2003, p. 139).

Biographical Notes

Revathy Kumar is an Associate Professor at the University of Toledo and an Adjunct Assistant Research Scientist at the Institute for Social Research's Survey Research Center, University of Michigan. *She has a Ph.D. in Education and Psychology from the Combined Program in Education and Psychology, University of Michigan. Her first line of research focuses on the social and cultural processes* involved in learning and development and in the construction of a sense of self and identity among adolescents in culturally diverse societies. A second line of research includes examining the effects of individual and contextual factors on youth problem behaviors.

Stuart A. Karabenick holds the positions of Research Scientist in the Combined Program in Education and Psychology at the University of Michigan, Ann Arbor and Emeritus Professor of Psychology at Eastern Michigan University. His research focuses on motivation, social aspects of self-regulated learning, influences of culture, and epistemological beliefs. He currently serves as Associate Editor of Learning and Instruction and coordinator of the Motivation and Emotion Special Interest Group of the European Association for Research on Learning and Instruction.

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JUSTICE IN TEACHING

Nura Resh and Clara Sabbagh

Introduction: Distributive Justice in the Educational Sphere

Distributive justice encompasses the principles that 'ought' to regulate the distribution of societal resources ('goods' and 'bads') to individuals or groups in different social spheres (like, economy, health, education). Such principles derive from societies' moral infrastructure, whereby norms about 'right' and 'wrong' are set up and people are instructed to gear their behaviour accordingly. Hence, distributive justice is an embedded aspect of societal ethics. Three major, mutually exclusive, justice principles are delineated (Deutsch, 1985; Leventhal, 1980; Mikula, 1980): (1) equality – requires equal share to all in granting the resource in question, disregarding personal characteristics or performance; (2) need – demands to provide for the basic needs of people, even if this require the sacrifice of other individuals' interests; (3) equity (or meritocratic principle) – differential resource distribution based on personal effort, contribution or ability – which maintain or reinforce status differences among recipients (Sabbagh, Dar & Resh, 1994).

Education – a socially constructed and highly valued public resource is a distinct 'sphere of justice' (Sabbagh, Resh, Mor & Vanhuysse, 2006; Walzer, 1983, 1995) whereby specific, but different, justice principles guide the distribution of instrumental, relational and symbolic goods (or punishments). These goods are constantly being distributed by teachers: they test students and grade their performance; they praise or scold them for learning efforts, homework and class behaviour; accordingly, they place them in classes, ability groups and tracks; and they grant them attention, respect, affection etc. Students, on their part, evaluate the 'fairness' of these distributions and as a result feel that they were justly – or unjustly – rewarded. Hence, justice (or, in students' lingo, 'fairness') is an important component of students' school experience that have far reaching implications for their actual educational opportunities, their motivation, attitudes, affection and actual behaviour. Yet, empirical investigations about the distribution of different educational resources and the possible impact of 'just' and 'unjust' distribution on students' motivation and behaviour are relatively scarce.

In the following we shall elaborate on teachers as agents of distributive justice who are responsible for the just (i.e., morally 'right') distribution of different kinds of educational resources, reviewing research regarding these questions: what are the

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dominant principles that guide teachers' distribution preferences? How do they allocate these resources in their actual daily practice, and what are their students' evaluations of the fairness of these allocations? Specifically, we identify and discuss four distinct school resources, reviewing the research about perception of principles that normatively ought to guide distributions and evaluations of their actual just distribution: grading (student evaluation), teachers' treatment of students (attention, affection, and discipline), teaching–learning (pedagogical) practices, and the special case of radical pedagogy, and allocation of learning places (see prior review by Sabbagh et al., 2006).

Two remarks are important in this regard: First, not every educational good is distributed by teachers, especially those accruing from national policy. For example, the allocation and distribution of educational resources (finances and manpower) and decisions about the structure and composition of schools are a result of policy definitions and legal acts that are carried out by the educational administration at the national or district level. However, at the school level teachers, as well as principals and counsellors, are invested with the responsibility and authority of allocating a number of educational resources that constitute the core of students' educational experience. To the degree that schools enjoy greater autonomy and control over educational matters, the scope of goods that teachers have discretion over their allocation widens. Second, while we focus here on teachers as agents of justice distribution, it is worthwhile to note that they themselves are a significant educational 'good': 'Teachers' quality', as reflected in their professional and academic training and the degree of commitment to their task, is an asset in itself, whose distribution among students might affect their school experience and account for their academic chances. We shall touch upon this aspect in the discussion.

Students' Evaluation (Grading)

Evaluating students' performance by grading them on a standardized, hierarchical scale has become a universal feature of the teaching–learning process.¹ Grades have manifold instrumental and psycho-social effects (Deutsch, 1979; Jasso & Resh, 2002; Nisan, 1985) thus considered a highly valued, wanted reward (Green, Johnson, Kim, & Pope, in press): They serve as 'gatekeepers', providing or withholding access to classes, ability groups and tracks; they provide feedback about students' worth, effecting their self image and motivation, as well as their parents expectations; they may also effect the student's social status and popularity in the class. Grading practices have also a latent function, inculcating important values and norms of behaviour that prevail in the wider society (Deutsch, 1979; Dreeben, 1968).

By definition, grades are being allocated differentially, and their distribution is mainly guided by rules of meritocracy (rules that stress personal achievement) rather than by ascription (in-born characteristics, such as gender or race), or particularistic rules (personal relations with the teacher, kinship ties, and the like) (Hurn, 1985; Parsons, 1959). It seems however, that in grading their students, teachers combine different equitarian considerations: talent, actual performance (success in tests), invested effort, class learning behaviour, and may also apply the principle of need (students' need of encouragement) in their considerations (Dushnik & Sabar Ben-Yehoshua, 2000; Nisan, 1985; Resh, 2006). In an investigation of high school teachers in Israel, where teachers had to attribute the weight to each of the above five principles, very few concentrated on one or two considerations only. On the average, they suggested that performance (success in tests) should weigh about 50% in the final grading, and student's effort and class learning behaviour should weigh about 19% and 14% respectively (Resh, 2006). Moreover, teachers' grade distribution may not be applied universally but rather vary in different condition according to student's capacity, gender or subject matter. For example, findings in the above mentioned study revealed that about half of the teachers tend to differentiate grading for 'weak' and 'strong' students, ascribing greater weight to effort and need in grading the 'weak' ones. Moreover, science teachers seem less performance-driven than their math teachers' colleagues: in allocating grades they attribute greater weight to effort and need, and this tendency is accentuated in the case of grading (differentially) the weak students.

With regard to gender, maybe because of the strong consensus about equal gender treatment (including, grading) there is no investigation of principle preference (the 'ought') in grading by gender. However, there is ample evidence about the actual distribution of grades, showing that girls are getting better grade than boys' who expectedly feel more deprived (e.g., Dalbert & Maes, 2002; ETS, 1977; Jasso & Resh, 2002; Resh & Dalbert, 2007, in US, Israel and Germany).

Finally, grading distribution practices may vary across socio-cultural contexts. Expanding on Nisan (1985), who found that both students and teachers in junior high schools believed that three main meritocratic distribution rules should guide grading: exhibited performance, learning effort and class participation, Sabbagh, Faheer-Aladeen, and Resh (2004) found that Israeli-Jewish high school students tend to ascribe stronger importance to meritocratic rules, while the more traditional Israeli-Druze students appear to be somewhat more inclined to believe that grading should be guided by particularistic or ascriptive rules.

Teachers' Treatment of Students

Teachers play an important role in distributing a wide range of relational rewards to their students: attention, time invested to help students and respond to their needs, practices of encouragement, and respect and affection in their mutual interactions. They also react to non-routine events (distractions, class fights and other disciplinary violation) with disapproval, or punishments (Deutsch, 1979; Dushnik & Sabar Ben-Yehoshua, 2000). Just as teachers have the authority to define standards of learning demands and bestow grades in accordance with students' academic achievements, they also define appropriate class-behaviour norms, and they have the authority to set up positive and negative relational rewards in accordance (Weiner, 2003). The appropriate principles that underlie distribution of these goods (attention, help, respect, affection) are not unequivocal, though Jencks (1988) concludes that in the absence of firm arguments for differential rewarding, teachers' attention and care ought to

be equally allocated. Thus, justice distribution in grades and in attention and care seem to be based on different principles: equity principle may guide teachers' grades assignment (granting high grades to the most talented, successful, or motivated students), but would not be justifiable in granting attention and care. These rewards are likely to be distributed more equally, or even, based on the principle of need: more of it would be offered to weaker students (affirmative action).

The investigation of perceptions regarding just distribution of relational rewards was mostly carried out among students, who express their views about how teachers ought to behave and how they actually do, while teachers' perspectives were hardly studied. Exploring the definitions of entitlement regarding various positive rewards among Israeli junior high students, Dar and Resh (2001) found students to be more egalitarian in the relational domain (teacher–student and peer relations) than in the academic domain. In another study, Thorkildsen, Nolen, and Fournier (1994) who examined 7–12-year-old students about their fairness perceptions of the practices teachers use to enhance learning motivation, found that most of them seem to prefer a more egalitarian distribution. They perceived practices that stress praise for excellent performance as unfair, because they harm those who are not praised and do not provide any direction for future learning. The practices considered as the most fair were those that foster motivation among all students, by encouraging 'fast learners' to attack more challenging problems (the principle of equity) and 'slow learners' to try out new ideas on how they can improve (equality–need rules).

Finally, with respect to the distribution of negative relational rewards, a study by Bear and Fink (1991) examined fifth and eighth graders' perceptions of the fairness of teachers' disciplinary practices in regard to classroom disturbance and involvement in a fight. Assuming that the latter is the more severe offence, because it is intrinsically (morally) wrong, harming and violating the rights of others, while the former, involves breaching a social convention, which is more bound to a social context and should therefore have less severe repercussions, they expected a harsher punishment for the more sever offence (fighting). The authors further assumed that judgments of fairness of a given disciplinary practice would also take into account the reputation of the transgressor as a 'well-behaved' or 'misbehaving' student. Findings confirmed both assumptions: suspension of the transgressor was perceived as fairer for fighting than for disturbing the classroom and as fairer for a past misbehaving student than for a well-behaved one. Interestingly, however, the effect of reputation on fairness judgments was stronger than the effect of severity of the infraction. Thus, disciplinary practices (negative rewards), like academic rewards (i.e., grades), were guided by a notion of equity, while the 'fair' distribution of relational goods (attention, help, care) tend to be guided by equality and need principles.

Pedagogical Practices

Pedagogical practices can be defined as the ways in which teachers choose to carry out their function to encourage learning: to promote knowledge acquisition and intellectual and personal development, as the basic pre-conditions for future successful performance in society. Resting on philosophical and pedagogical premises about the aims of schooling, the place of children and the role of teachers in the educational process (Anderson & Tverdova, 2001), teaching practices are usually put to the fore and justified in terms of their effectiveness: the degree to which they enhance students' motivation, learning engagement, academic success and personal development. If indeed, as accepted, class practices affect opportunities to learn and personal development, then questions arise as to their just implementation in schools: which is the more appropriate ('just' and effective) pedagogy and how to make sure knowledge is justly distributed via these practices to all students (Chizhik, 1999; Dougherty, 1996; Thorkildsen et al., 1994).

Investigating what kind of justice principles should be (or actually are) applied in teaching practices, Thorkildsen (1989) examined students' perceptions regarding five classroom practices in heterogeneous classrooms: 'Acceleration' – (fits the equity rule); 'fast worker sit and wait' (equality rule); 'peer-tutoring' by fast learners (combined equality and need); 'enrichment' for fast learners (equity rule, though more egalitarian than acceleration); and 'all move on, slow ones never finish' (fits a Machiavellian rule). It was found that 'peer-tutoring' and 'enrichment' was believed to be the most just, and 'all move on, slow ones never finish' to be the least just (see also Thorkildsen, 1993). However, most students claimed that the practice of 'enrichment' was most frequently used by teachers, a gap that points to a possible source of students' sense of injustice.

Against the background of macro-social processes (mainly in the second half of last century) that affected both educational concepts and structural changes, and based on the 'child-centered', 'progressivism' premises, a host of 'pedagogies' have evolved, which rest and are justified, though indirectly, on notions of social justice, (for reviews, see, e.g., Anderson, 1995; Semel & Sadovnik, 1999; Van den Berg, 2002; Windschitl, 2002). Accordingly, children should be more active participants in the learning processes, their concerns, interests and realities of life should be taken into account in classroom practices, which will thus result in more symmetric teachers–students power relations, and both curriculum content and pedagogical practices should recognize (and respect) cultural differences, thus ensuring a more equitable distribution of 'opportunity to learn'.

'Authentic pedagogy', developed in the US by Newman, Marks, and Gamoran (1995, 1996) and implemented also by Roelofs and Terwel (1999) in Holland, is a good example of this trend. Its declared aims are (a) to provide equitable distribution of opportunities to learn for students of different backgrounds and (b) to empower school staff, parents and students. It is more radical than the classical liberal 'progressive pedagogy', explicitly directed towards the socially weak and deprived groups, whose educational advancement would contribute to a decrease of societal inequities. A model of 'productive pedagogies', that was developed by Gore (2001), Ladwig (1998), Lingard, Hayes, and Mills (2003), and Lingard, Hayes, Mills, and Christie (2003) in Queensland, Australia, is building on 'authentic pedagogy' and emphasizes 'recognition of differences' and 'supportive learning environment' as a means for enhancing social outcomes (such as social participation, active citizenship and justice), especially among the socially disadvantage students.²

Critical Pedagogy: Teachers As Political Agents

A more radical bent that leans on Neo-Marxist theory, conceives of teaching as a political role and explicitly argue that teaching practices should be used as a means to redress societal inequities and to achieve social justice, and the development of humanistic, critical, self-reflecting personality as the expected educational outcome (e.g., Adler & Goodman, 1986; Apple, 1979; Ayers, 2004a, 2004b; Freire, 1970; Giroux & McLaren, 1986; Hyslop-Margison, 2005; McLaren, 1989). Rather than offering a set of concrete pedagogical practices, Ayers (2004a, 2004b) argues that teaching is political because it is about the reconstruction of public schools and the achievement of equality by promoting engaged citizens who as students develop agency and (critical) reflection. In the same vein, Kroll et al. (2005) state that teachers' political role re-achieving social justice should be enhanced by means of key pedagogical principles such as inquiry and reflection, collaboration and care. These in turn, is designed to improve the academic opportunities of disadvantaged students and their future socio-economic chances in the wider society. Underscored in this framework is instruction and teacher-students' relationship as a moral obligation that should be directed to redress existing social inequities and introduce changes in the institutional structure of classrooms and schools (for a review see Hyslop-Margison, 2005) and recognize 'difference', defined along cultural and socio-economic lines (see also Connell, 1993).

'Critical Pedagogy' (also, dialogical pedagogy) developed by Paulo Freire (1970, 1986; see also Shor, 1987) and followed (at least intellectually) by scholars around the world, is the most known version of pedagogy reflecting this radical approach (e.g., see Adler & Goodman, 1986; Aloni, 1998; Apple, 1979, 1982; Giroux & McLaren, 1986; Giroux, 1988; McLaren, 1989). Its main mission is the attempt to inculcate in students the objection to culture of exploitation and oppression that characterize the capitalist system, and the aspiration for solidarity and an equal society. This should be achieved by liberating students' consciousness through the construction of solidary, democratic and critical school experience, and by focusing on a dialogue as the central pedagogical practice.

Thus what is suggested by scholars in this perspective is not just a pattern of just distribution of educational good (i.e., knowledge) but a form of pedagogical practice that is inherently just, as it ensures the active and effective inclusion of students, especially those from weak social groups (and minorities), in a meaningful, emancipating learning process. According to this approach, teachers are assigned a 'transformative role' whereby they are expected to adopt an active and critical perspective regarding the existing societal power relations. Rather than acting as oppressive agents of the reproduction of existing ruling ideologies and power relations, their activity should aim at redressing societal inequities and at emancipating students and nurturing them as agents of social change that challenge conventional thought and resist political agendas that may hinder this effort (see Ayers, 2004b).

Allocation of Learning Places

Learning places are allocated to students through selection practices that assign them to classrooms, tracks, or ability groups.³ The main arguments proposed for organizational manipulation that separates students into academic homogeneous learning groups is the need to ensure didactic fit in the teaching–learning process – i.e., to adjust level, pace, and method of teaching to student ability – and to cater for students' needs and interests by adjusting their content of learning (Dar & Resh, 1997; Hallinan, 1988; Oakes, 1985).

Justice considerations regarding decisions on placement in learning-groups, relate first to principles that should guide a just selective process: Who should learn with whom, and in which school and classroom? How should students be assigned to ability groups and tracks? While the call for greater inclusiveness (e.g., children of special needs) rest on the principle of equality, selection and admission practices are commonly conceived as being guided by the rules of meritocracy; that is, equity-based interpretations of equal opportunity, which justify inequality on the basis of effort and achievement (Arrow, Bowles, & Durlauf, 2000; Oakes, 1985). A different interpretation would emphasize the 'need' principle as guiding these differentiations, especially in regard to tracks (e.g., Connell, 1993).⁴ In any event, deviation from meritocratic considerations that benefits students from strong backgrounds on the basis of their ascriptive characteristics, such as gender, socio-economic status, race or ethnic origin, are usually considered to be unfair (Elster, 1992, 1995).

Most studies that examine the extent to which actual distribution of learning places fits perceived ideals of justice agree that meritocratic rules such as educational performance and ability are most salient in determining assignment to schools, tracks and ability groups. Some studies support the claim of just placement (in its liberal interpretation), based solely on ability and performance (Alexander & Cook, 1982; Murphy & Hallinger, 1989). Findings of more recent studies, suggest that, beyond meritocratic considerations, students of affluent background and hegemonic race or ethnic origin have a better chance of being placed in higher or more prestigious learning groups (Gamoran, 1992; Garet & DeLany, 1988; Hallinan, 1992; Resh, 1998; Schuman, 2001; Vanfossen, Jones, & Spade, 1987). School counsellors, who are central figures in guiding students at transition points and shaping decisions about their placement in ability groups, classes or tracks, serve as 'gatekeepers' of the educational stratification system (Cicourel & Kitsuse, 1963). For instance, in their study of the rules that affect counsellors' considerations when they assign students to junior high schools, Yogev and Ayalon (1987) found that meritocratic considerations were less determinant for track placement of disadvantaged as compared to affluent students, and that there was a direct effect of students' ethnic characteristics on school assignment in the case of disadvantaged students. Similarly, Resh and Erhard (2002) found that school counsellors tend to convey 'cooling-out' messages to a greater extent to low class and weak students.

Although the evidence is not conclusive, it appears that girls have a better chance than boys of being placed in higher ability grouping (Jones, Vanfossen, & Ensminger, 1995; Kfir, 1988) and in the more promising academic tracks in high school (Resh, 1998). They are however, less able to accede to the most prestigious, scientific track (Ayalon, 1995). Moreover, since differentiation and placement in schools is an organizational arrangement and the number of learning places is limited and indivisible, it takes place under conditions of competition. When applicants or candidates outnumber the vacancies in a school or classroom, 'tragic choices' must be made (Calabresi & Bobbit, 1978; Elster, 1992), which are affected not only by academic criteria but also by organizational and administrative considerations, which usually will disadvantage the weak social groups and will not achieve the aim of homogenizing the learning group (Hallinan & Sorensen, 1983).⁵

Discussion and Conclusion

The critical significance of a just school, or rather of justice in schools, is by-and-large three-folded: First, ensuring school 'fairness' in both structure and daily practices is of a merit of its own, since people are striving to achieve justice and to restore it when violated. This is especially true as schools represent to their students a micro-cosmos of society. Second, the just, or unjust, distribution of resources and rewards in school has an instrumental significance, since it affects students' motivation, their chances of educational success and as a result, their future educational and life chances. Finally, the experience of 'just' or 'unjust' distribution of resources in schools is a form of latent curriculum that may be a factor in shaping students' worldview, social perspectives, and actual behaviour.

What happens in schools depends to a great extant on teachers who are the major agent of justice distribution. In the context of imparting knowledge, they are in daily and direct contact with their students and have the authority to allocate a variety of rewards (and punishments). In doing so, their behaviour and decisions represent to their students the adult world. Embedded in their role, thus, is a moral obligation to apply such allocations in as just a fashion as possible. However, justice, like beauty, is in the eye of the beholder (Markovsky, 1985): norms that guide the distribution of various resources are historically and culturally-bound. Thus, the determination of each individual's deservedness regarding any specific reward (or punishment) may not rest on a fully consensual regulation and be affected by personal (social) views.

A more radical interpretation of justice as a moral obligation of teachers, is reflected in the perception of teaching as a political act that involves moral relationships and moral instruction directed towards introducing changes in the institutional structure by promoting equality and educational opportunities, and helping to develop engaged citizens through practices that enhance in students agency, reflection, collaboration and care (e.g., Ayers, 2004a; Connell, 1993; Kroll et al., 2005). Such notions are led by the various versions of critical pedagogy. The questions of whether and what kind of pedagogical practice succeed in achieving these ambitious aims are an important direction for future investigation. There is also no question that moving in the direction suggested by critical scholars, requires a rather dramatic change in teachers' preparation curriculum, as well as in various in-service training programmes.

Finally, in this chapter, we have discussed the role of teachers as agents of distributive justice in schools. Turning up-side-down our viewpoint, teachers, or rather 'quality of teachers' is in itself a distributed 'good', a resource of critical importance that affect students' educational outcomes, although there is lack of consensus over the specific definition of a 'qualified teacher'. The empirical support to the connection between teachers' qualifications (teaching ability and academic knowledge, subject matter expertise, teaching certificate, experience, pedagogy, and the like) and their students learning and academic progress, self-image, motivation, and attitudes (Darling-Hammond, 2000, 2004; Hanushek, Kain, & Rivkin, 2004; Ingersol, 2005; Raudenbush, Fotiu, & Cheong, 1999).

However, abundant empirical evidence about the actual distribution of teachers in schools, show clearly that (a) students of low-SES and lower-track classes have a much greater chance of being taught by less qualified teachers and (b) schools in disadvantaged areas are more likely to have higher concentration of under-qualified teachers, suffer from greater teachers' turn-over, which increases the rate of out-of-field and less experienced teachers in school (Darling-Hammond, 2004; Ingersol, 2005).

In the lack of investigation regarding perceptions of just distribution of teachers' quality, one would tend to suggest an equal exposure of all students to qualified teachers as the 'right' (just) allocation.⁶ However, an argument could be put forward for allocation by need (affirmative action), or by talent (expected contribution to society). This is a line of research worthwhile to follow, and, in any event, questions regarding the process of recruitment and training of teachers, as well as their placement in schools, are also relevant to the study of justice in education.

Considering the high significance attributed to formal education as an essential asset to both individuals and the public, the relatively limited discussion about it in the framework of justice distribution, is a bit surprising. Yet, it is not that educationalists and academics were not concerned about injustice in the distribution of various educational resources, but rather they were framing their concerns in terms of inequality, gaps, disadvantage and the like (Coleman et al., 1966; Jencks et al., 1972; Lynch, 2000; Shavit & Blossfeld, 1992). Resting on a seemingly consensus about equality of educational opportunity and equity in measuring educational outcomes, the educational literature and research was (and to a great deal, still is) occupied with the investigation of 'inequality, or gaps, in education', trying to explain its antecedents and offering policies or projects that may rectify these inequalities and decrease educational gaps. However, the very meaning of 'equal opportunity' is changing over time, in different contexts, and regarding different kinds of educational goods (e.g., Coleman, 1968; Howe, 1989, 1997). So is the definition of what is the 'right' principle to be used in the distribution of various resources to various rewardees, which seems to be bound by personal views and social norms in various cultural contexts.

Hence, framing educational issues as justice distribution issues, and elaborating the investigation of teachers' views about the just principles that should be used, vis-à-vis what is actually being implemented, in the distribution of the wide scope of 'goods' and 'bads' in schools, and in parallel, their students' evaluation of their justice experience in schools, should be a very productive and insightful venue for future research.

Biographical Notes

Nura Resh is a sociologist of education at the School of Education of the Hebrew University of Jerusalem. Throughout her career, she headed the sociology of education and the educational administration divisions. Her research centres on the stratifying effects of school and classroom organization, especially in the context of the Israeli educational system and its educational policy. A specific venue of this interest is the investigation of distributive justice in rewards' allocation in schools and the development of sense of (in) justice among students as well as teachers' perspective about just distribution of rewards in school. She is currently planning a large scale collaborative research (with Clara Sabbagh and Claudia Dalbert from Germany) on personal and contextual antecedents of sense of (in)justice in school and its relationship to formation of civic attitudes.

Clara Sabbagh is a senior lecturer of sociology of education at the Faculty of Education, University of Haifa. In her work she has endeavoured to analyze key aspects of social justice judgment (SSJ) that underlie the basic structure of society and to what extent they fit the way youth perceive them. In this area of study she has adopted a cross-cultural and multi-method perspective, with the aim of distinguishing between universalistic and particularistic aspects of SJJ. One aspect of her study explores the ways in which SJJ are expressed in the realm of education by highlighting the importance of justice in educational settings and the ways in which conceptions of justice, and grade distributions in particular, are dependent on the socio-cultural contexts in which students learn. Her work has been published in journals such as Social Psychology Quarterly, Journal of Social Policy, Journal of Cross-Cultural Psychology, Acta Sociologica, Social Psychology of Education and Social Justice Research.

Notes

- 1. In recent decades there is a growing criticism on this system of grading, but despite various suggestions for 'alternative evaluations' (e.g., Sizer, 1992), grades are still the common mechanism for students' evaluation.
- Other examples are 'democratic teaching' (e.g., Darling-Hammond, 1996), 'discovery learning' (e.g., Sharan, Shachar, & Levin, 1998; Sharan & Sharan, 1992), and 'cooperative learning' (e.g., Johnson & Johnson, 1994; Slavin, 1995, 1997). For a review, see Windschitl (2002).
- 3. As already mentioned, policy decisions at the national or state level effect assignment to schools, for example, desegregation policy (voluntary or imposed), registration boundaries or school choice, the degree of school inclusiveness. Within school decisions on classes, tracks, and ability group assignment, are mostly carried out by school principals, counsellors, and/or other appointed specialists in the school. Thus not every teacher is involved in these decisions.
- 4. Tracking (usually at high school level) is usually presented as a horizontal differentiation by interests. However, in practice tracks assumes a hierarchical order, differentiating students compositions (strong-weak), curriculum (less and more 'valued' subjects), and sometimes, future payoff (kind of certificate acquired at the end of school) (Dar & Resh, 1997). Hence, track placement is guided by similar principles (equity-meritocracy) to those of placements in ability groups, streaming etc.
- 5. Abundant research that investigates the 'effectiveness' of these organizational manipulations in student composition, i.e., its contribution to further educational and occupational chances of different groups, is beyond the scope of this chapter (e.g., Dar & Resh, 1997; Dougherty, 1996; Oakes, 1985; Oakes, Gamoran, & Page, 1992).

6. This notion is reflected, for example, in the goal set up by the No Child Left Behind Act (NCLB) in the US that <u>all</u> children will be taught by 'highly qualified' teachers.

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ETHICS AND TEACHING

Clara Sabbagh

The Issue of Morality in Teaching

Educational research has tended to portray the teacher's role as a morally neutral profession, mainly responsible for imparting knowledge and intellectual skills that can be objectively assessed. This has often been done in the name of the "rhetoric of teachers' professionalization," that is, the need to strengthen the status and prestige of teaching in society (Fenstermacher, 1990; Gordon, Perkin, Sockett, & Hoyle, 1985; Hoyle, 1980; Soder, 1990; Wise, 1986). Yet, as suggested by ancient thinkers such as Plato and Confucius, by modern writers such as Rousseau and Dewey, and by a growing number of contemporary authors who are attempting to revive classical normative ideas, teaching is not a "set of mechanical performances judged by the quality of product" (Sockett, 1993, p. 13). It is, rather, a "serving mission" or "a calling" (Hansen, 2001) which is generically subservient to a variety of moral ends (Fenstermacher, 1990; Soder, 1990; Tom, 1984; Valli, 1990; Veugelers & Oser, 2003). According to this approach, the role of teaching to impart knowledge is inseparable from its moral role (Ball & Wilson, 1996; Goodlad, Soder, & Sirotnik, 1990; Olson, 1992). Specifically, teaching is concerned not only with enhancing students' mastery of the subject matter in preparation for their future occupations, but also with their development as moral persons and citizens in a democratic society (Carr, 2006; Sockett, 1993, p. ix).

With these considerations in mind, the present chapter attempts to clarify the basic considerations in ethical thinking and to emphasize the great significance of ethics for the teacher's role. It will focus on three major questions: Why is teaching a moral endeavor? What types of moral ends or considerations apply to the practice of teaching? To what extent can the teaching of ethical values be translated to codes of behavior?

Why Is Teaching a Moral Endeavor?

The notion of morality, or ethics in ancient Greek (from "*ethikos*," meaning "arising from habit"), refers to the evaluation of what is right and wrong, good and evil, worthy or unworthy. This is to be distinguished on the one hand from personal preferences that

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching, 683–693.* © Springer Science+Business Media LLC 2009 express mere subjective desires, and on the other hand from testable factual claims about the world (Buzzelli & Johnston, 2001; Strike & Soltis, 1985).

The notion of teaching covers all "the activities of getting others to learn with a primarily educational end in view" (Sockett, 1993, p. 11). In other words, teachers are guided in their work by conceptions of what an educated growing person is like (Hansen, 2001). In doing so, they are necessarily assuming that certain forms of development are better than others, that certain behaviors are worth enhancing, that certain personality traits are important to develop – which amounts to making a moral evaluation on what is right or wrong, good or bad, worthy or unworthy. Indeed, there are myriad explicit and implicit ways in which teachers weave morality into their practice. For instance, teachers may reward or punish students' behavior, thus judging one behavior to be better than another. Or they may encourage students to learn certain skills and develop their potential in a certain way, thus implying which capacities are more valuable. They may teach standards of achievement, and in this way influence the student's basic choices in life. Or they may portray certain qualities, such as honesty or patience or tolerance, as ethical virtues to strive for.

Such teaching practices presuppose specific conceptions of what it means to live a worthier, or more moral life (Buzzelli & Johnston, 2001; Fenstermacher, 1990; Hansen, 1998). In this sense, teachers are given the responsibility to enhance the human good and promote students' well-being (Noddings, 2003; Sockett, 1993). Moreover, they are responsible for preparing "good citizens" who are fit to participate in an organized civic community, which is to say – for enhancing the collective good by means of enculturation of the young (Aristotle, 1998; Goodlad, 1990; Hurn, 1985; Saha, 2000, 2004; Youniss & Yates, 1999).

Hence, teachers are constantly imparting conceptions of morality upon their students. Teaching decisions – whether to teach one way rather than another, to emphasize one skill at the expense of another skill, to punish or not to punish – usually involve moral decisions and evaluations. But how are these choices and evaluations made? What principles can guide such choices?

In the past 2,500 years, philosophers have developed various principles to guide ethical decisions. This field of study has come to be known as normative ethics. The various approaches to normative ethics are commonly divided to three main groups: deontological ethics, consequentialist ethics, and virtue ethics. These three approaches have influenced much of the current educational research on the ethical values or ideals guiding teachers. It is worth noting, however, that they do not exhaust the entire range of possible approaches (for extensive review of other ethical approaches to teaching see Oser, 1994; Valli, 1990)¹ and that they do not necessarily reflect teachers' and educators' actual ways of thinking (Hansen, 1998).²

Approaches to Ethical Values in Teaching

Leaning on philosophical approaches to normative ethics, empirically oriented educational research has yielded three major conceptions of teachers' ethical ways of thinking.³ These three attempts to describe plausible, though not fully adequate, ways of thinking about ethical issues, and thus to uncover the hidden structure of moral dilemmas (for examples see Husu & Tirri, 2001, 2003; Sockett, 1993; Strike & Soltis, 1985; Tirri, 1999). Common to these approaches is the assumption that teachers, as moral agents who hold a position of power in relation to their students, are expected to critically reflect upon their practices and analyze their moral and political implications (Tom, 1984; Valli, 1990).

The Deontological, or the Duty-Based Approach

This approach, developed by prominent philosophers (Kant, 1964; Rawls, 1971)⁴, states that people's (or teachers') decisions and actions should be guided by considering their own rights and duties and the rights and duties of others (Green, Johnson, Kim, & Pope, in press). Specifically, teachers' decisions or behavior are judged as moral (or immoral) if they fit (or contradict) their explicit and implicit duties with respect to individuals (Kant, 1964) or social institutions (e.g., schools) (Rawls, 1971; Walker, 1998). For instance, teachers' behavior is judged moral if it meets their obligation to grant students the universal right to education. Importantly, teachers' duties and obligations are determined by a-priori rules and principles of behavior rather than by evaluating the results of their actions.(Husu & Tirri, 2003; Walker, 1998). In other words, teachers are expected to do certain things because they are right (or refrain from doing them because they are wrong) independently of whether or not they produce benefits or good consequences. For example, adherence to principles of academic integrity, such as honesty or open-mindedness, is valued in itself even if it leads to negative consequences (e.g., being expelled from school). Conversely, an act that brings about a certain benefit may nevertheless be judged unethical if it was achieved by "wrong" means, for example, if learning was achieved by means of cheating and plagiarism. It is possible, however, to distinguish between contingent (local) duties, limited to specific circumstances, such as deferring to one's superiors or transmitting national values, and categorical or universal (global) duties, such as the promotion of intellectual freedom and the treatment of students with respect, irrespective of class, color or creed (e.g., Turiel, 1983). The latter have to be carried out consistently across nations, regardless of specific circumstances (Carr, 2006).

Consequentialism, or the Outcome-Based Approach

In contrast to the deontological approach, which judges an action as morally right if it follows the appropriate principles of behavior, consequentialism (or the outcomebased approach) judges actions in terms of their positive or negative *consequences*. An activity or policy, including the distribution of social resources, is viewed as morally right if it maximizes utility among people in the society or world The most common version of consequentialism is utilitarianism, which holds that a morally right action is one that produces good (utility) for everybody to enjoy (as opposed to the egotistic version of consequentialism, which is concerned only with the well-being of oneself or of one's group). More accurately, utilitarianism holds that an action is morally right if it maximizes utility (good consequences) in the world, in other words, if it adds to the population at large more good and less evil than any other action available to the person. Different thinkers developed different conceptions of "utility," or the good which ought to be maximized. Jeremy Bentham, the father of consequentialism, took utility to be pleasure, in the hedonistic sense (1948 [1989]). John Stuart Mill, his follower, undertstood utility to be happiness (1980 [1863]). Contemporary utilitarians, such as Richard Hare (1982) and John Harsanyi (1982), define it in terms of personal preferences (or will and desire).

Noddings' (2003) recent pioneering and insightful book Happiness and Education may be generally interpreted as taking a consequentialist approach to teaching and education, because it focuses on an important, but relatively neglected issue: To what extent, and through which means, should the educational system in liberal democracies contribute to the individual's attainment of happiness? The author suggests a dynamic, optimistic and egalitarian approach which would help every student attain happiness by means of teaching practices that enhance their relations of care with students. ⁵ Her central claim is that good teaching practices can help bring happiness to all. The promotion of "happiness to all" as a moral educational aim is justified on several grounds: First, happy people seem to be good (e.g., less violent or cruel). Second, a greater emphasis on happiness may strengthen students' motivation to learn and increase their positive experience of school. Finally, and probably most importantly, the traditional emphasis on a narrow range of intellectual achievements (see Bell, 1977; Lucas, 1975) as crucial for happiness (Aristotle, 1998; Mill, 1980 [1863]) hinders students' self-realization in a wide range of domains. In contrast, by making happiness an educational aim, teachers and schools can facilitate students' self-realization in a wide range of domains (Walker, 1998). Moreover, if we socialize students with certain moral qualities (e.g., care about civic matters) we may thereby enhance their well-being (Hansen, 1998).

This approach to happiness is important in that it reminds us how crucial interpersonal relations are for happiness. It thus serves to counterbalance the traditional versions of consequentialism that are probably over-individualistic (Bentham, 1948 [1989]; Mill, 1980 [1863]). Nevertheless, in its present form this educational approach may be questioned on several grounds. For instance, it neglects the value of hard work, which is often necessary for self-fulfillment. In other words, suffering, like happiness, is an integral part of life that may lead a person (or student) to become morally better. Moreover, while Noddings is right that the importance of relations for happiness has been traditionally neglected, her attempt to portray all forms of happiness as relational may be argued to be an over-generalization similar to that of her traditional opponents.

Virtue-Based Approach

In contrast to the deontological and consequentialist approaches, which seek to determine what makes an action morally right, the virtue-based approach seeks to define what makes a person good. In the context of education, this approach specifies the teacher's personal and interpersonal traits which are to be aimed at, and argues that the "sustainable moral quality of individual human that is learned" (Sockett, 1993, p. 42) should be the focal point of ethical theory on teaching. Thus, virtue ethicists stress the cultivation of character and attempt to describe what characteristics a virtuous person would have in the context of a civic community, and argue that people should seek to attain these characteristics (e.g., Aristotle, 1998; Ayers, 2004). It is sometimes said that in comparison with other professionals who serve others, such as medical doctors and lawyers, teachers' personal character are particularly important because they are responsible for the personal and moral development of their students (Carr, 2006).

Sockett (1993) identifies five major professional virtues that are constitutive of the practice of teaching and of teachers' capacity to handle moral dilemmas (see also Oser, 1991): (1) Intellectual honesty - refers to the capacity to access knowledge and truth, to distinguish between fact and fiction and to create trust in students, all of which lie at the heart of teachers' role (see also Ball & Wilson, 1996; Mayeroff, 1971); (2) Courage is defined as "deliberate practical reasoning in circumstances of difficulty, turbulence, or trouble" (Sockett, 1993, p. 71). This means that the teacher is ready to defend his or her own pedagogical principles even when this is likely to lead to a negative cost for herself/himself (see also Mayeroff, 1971); (3) Care⁶: This virtue refers to how individuals treat others (Whether other humans, nonhumans, ideas or inanimate objects). It stresses empathetic understanding and relationships based on receptivity, relatedness and responsiveness, rather than application of rational, formal and abstract principles (Mayeroff, 1971). (4) Fairness (see also chapter on justice in teaching in this volume and Sabbagh, Resh, Mor, & Vanhuysse, 2006): It is assumed that students who are treated fairly by their teachers (who are authority figures representative of adult life outside the family) are more likely to expect fair treatment outside schools and to support it in social institutions (see Rawls, 1963). Thus, this virtue, which implies respecting and equally treating students as thinkers and as people with lives and interests of their own, is essential for the civic, social and for the moral growth of children (Ball & Wilson, 1996). (5) Practical wisdom: This virtue requires reflective thinking that enables teachers to judge and behave prudently and with reference to the other virtues. In other words, it involves knowing "what to do when and why" (see Shulman, 1987; Sockett, 1993, p.85).

Applied Ethics in Teaching: Toward a Professional Code of Behavior

As suggested above, the study of ethics in teaching has focused mainly on the moral values that may guide educational practices and that underlie teachers' dilemmas. Less attention has been given to studying how to translate ethical values to codes of behavior that define teacher's role. Such an ethical code would specify standards of knowledge, skills and behavior, and how to make reasoned judgments in the framework of teaching as a credentialized profession. This neglect is surprising given that moral considerations are so pervasive in teaching. The teacher's role, after all, includes nurturing many aspects of children's welfare (such as independence, respect, decency, and trust), transmitting culture, preparing for civic life, and providing meanings to life, all of which involve ethical issues and dilemmas.

Unlike institutionalized professions, such as medicine or social work (e.g., Landau & Osmo, 2003), the teaching profession does not have a formalized community or a shared code of ethics that examines common ethical issues and problems and specifies explicit standards of proper action (Ball & Wilson, 1996). Nevertheless, several attempts have been made to specify general and context-specific ethics codes that underlie teaching practices (Airasian, 2005; Brookhart, 2004) and that are commonly found in other professions (Nickols & Belliston, 2001).

A good example of an ethics code for teaching has been suggested by Strike and Soltis (1985). In their influential book *The Ethics of Teaching* the authors focus on teachers' commitment to students, and specify three main principles, which can be seen as deontological:

First, students are entitled to due process, i.e., a procedure ensuring that teachers' decisions are not made arbitrarily, unsystematically, or on the basis of irrelevant considerations. This "non-maleficent" principle aims at protecting students from disparagement by instituting just procedures and assuring learning and safe environments for students. It seeks to ensure appropriate distribution of goods (e.g., grades, learning places, and teachers' attention) as well as distribution of bads and punishments (see in this volume chapter on justice in teaching). For instance, a teacher who fails to read assignments carefully when grading, or who assigns grades for reasons unrelated to learning, violates the rule of due process. A second ethical principle aims at ensuring teachers' autonomy (or intellectual freedom) and at encouraging autonomy in students. This is done by safeguarding independence of thought and action, and by providing access to different viewpoints without deliberate suppression or distortion. The last principle in this ethical code is aimed at ensuring equal treatment of students. It states that teachers should not exclude students from participating in any program on ascriptive basis (e.g., sex, race, religion) or deny benefits from any student. This is seen as a key educational moral concept underlying teachers' code of professional ethics.

Ethics codes for teaching have also been examined in more specific educational contexts (Airasian, 2005; Brookhart, 2004). For instance, in a recent study Green and colleagues (in press), in an effort to consolidate shared views on teaching ethics, examined to what extent educators agree on the ethical principles governing the evaluation of students. They identified two principles that seem to capture major aspects of classroom evaluation. The first is the principle of "doing no harm" (or non-maleficent values), aimed at protecting the rights of students who are affected by evaluation. It includes values such as confidentiality, the requirement to provide a written policy about how grades are calculated, and the requirement to serve the needs of students and to treat them with respect "as thinkers and as people with lives and interests and thoughts" (see also Ball & Wilson, 1996, p. 185). The second principle is to "avoid score pollution." It states that test scores should represent the students' actual knowledge and not be "polluted" by irrelevant factors such as unconscious preference for certain students (bias issue) or retaliation for behavioral problems or late work (grading practices).

The lack of an agreed-upon ethics code, aside from being indicative of the status of teaching as a semi-profession, is likely to evoke "ambiguities of judgment and appraisal within teachers' perceptions of, and responses to (moral) dilemmas of practice" (Ball & Wilson, 1996, p. 187).

Conclusions-Discussion

Issues regarding the ethics of teaching have occupied education scholars mainly in the philosophical-normative tradition. Studies have aimed at determining the "ought," seeking validation and justification of the ethical values which should guide teachers practice. The empirically-oriented research on teachers' ethics follows the normative tradition but looks for correspondence between normative assumptions and empirical reality (the "is"). It examines those ethical values that are actually adopted by teachers, educators' beliefs about these values in various situations, and the motives underlying ethical behavior (Husu & Tirri, 2001, 2003; Sockett, 1993; Tirri, 1999). Thus, despite the conceptual and methodological differences between philosophical-normative and empirically oriented studies of teaching ethics, these two research traditions have often developed in parallel ways.

While the common ethical approaches (deontological, consequentialist and virtuist) provide a parsimoneous, and to some extent even simple framework for analyzing teachers' ethical judgments and decision making, Nash (1996) has suggested that "real world" ethics is more complex and ambiguous. Ethical behavior involves a complex process of decision-making in a world that is endlessly interpretable, and in which discrepancies and conflicts often arise between the various moral values that are relevant to the classroom. Consequently, only rarely is there a final or definite solution to an ethical dilemma (see also Buzzelli & Johnston, 2001). This ambiguity and complexity of moral judgment and appraisal is probably amplified by the absence of a consolidated professional ethics code in the teaching profession (Ball & Wilson, 1996).

Thus, when teachers apply the notions of "right" and "wrong" in their teaching practice, they are likely to adopt a complex and multivoiced moral perspective (Husu & Tirri, 2003). Moreover, although a teacher's moral values may sometimes be consistent with each other (for example, the duty to respect a student is likely to be consistent with the value of caring), this is not always the case. For example, in cases where rights and duties conflict, scholars have been reluctant to assume that a single integrative account is capable of doing justice to the entire range of moral considerations and to specify which values should take priority in which case. They have also been reluctant to reduce moral behavior to a small set of basic moral stances or to formulate a general principle that would guide teachers in ethical decision making (Carr, 2005; Keith-Spiegel, Whitley, Ware Balogh, Perkins, & Wittig, 2002; Sockett, 1993; Strike & Soltis, 1985; Valli, 1990).

The complexity and ambiguity of moral behavior has several interrelated implications. First, a given teacher is not necessarily guided by an overall consistent, univalent body of moral considerations or by a fixed hierarchy of ethical value (for an example of this approach in the area of social justice judgments see Sabbagh, Cohen, & Levy, 2003). Second, in order to arrive at an ethical decision teachers often weigh several conflicting ethical values at the same time and combine them together in various manners, rather than using one single coherent ethical value at a time. Moreover, they do so differently in different situations. In short, teachers may differ from each other in their personal style of multivalent moral judgments.

For these reasons, we suggest that research should allow for the possibility that teachers are not invariably seekers of consistency and should not assume that they necessarily adhere to the logic of one single body of moral values. Rather, their decision making may reflect ambivalent dispositions and behaviors and consist of dynamic alternations of norms and counter-norms (Kluegel & Smith, 1986; Merton, 1976).

Two concluding remarks are in place here: First, despite the growing number of empirically oriented studies which attempt to characterize the types of moral dilemmas encountered by teachers, only relatively few have focused on the powerful (though often tacit) impact of teachers' moral decisions on their students (for example see Jackson, Boostrom, & Hansen, 1993; Norberg, 2006).

Second, the present review assumes the existence of multiple ethical approaches or principles, which cannot be reduced to a single, unified system of moral values. The tradition of normative ethics has attempted to specify how moral issues ought to be solved in a general and objective manner by applying general rational procedures (e.g., Rawls, 1971). It is surprising that the majority of empirical studies on teaching and ethics have followed suit and focused, too, on general rational principles. After all, empirical studies deal not with abstract normative principles, but with actual practices of actual human beings, and it cannot be assumed that human behavior is governed by simple, context-free, rational principles. Ethical decisions are probably shaped by specific historical and contextual conditions which mold the issue's form and meaning (Mannheim, 1991). It is therefore unfortunate that studies rarely address questions of how culture may affect teachers' ethical values and what impact these values have on students, or how these values may vary across institutional settings (e.g., higher education vs. schools). Future research in this direction should provide a deeper understanding of such processes as well as of the explicit and implicit ways in which teachers' ethical values affect students' welfare.

Biographical Note

Clara Sabbagh is a senior lecturer of sociology of education at the Faculty of Education, University of Haifa. In her work she has endeavoured to analyze key aspects of social justice judgment (SSJ) that underlie the basic structure of society and to what extent they fit the way youth perceive them. In this area of study she has adopted a cross-cultural and multi-method perspective, with the aim of distinguishing between universalistic and particularistic aspects of SJJ. One aspect of her study explores the ways in which SJJ are expressed in the realm of education by highlighting the importance of justice in educational settings and the ways in which conceptions of justice, and grade distributions in particular, are dependent on the socio-cultural contexts in which students learn. Her work has been published in journals such as Social Psychology Quarterly, Journal of Social Policy, Journal of Cross-Cultural Psychology, Acta Sociologica, Social Psychology of Education and Social Justice Research.

Notes

^{1.} For instance, leaning on the ideas of "critical pedagogy" (Apple, 1979; Giroux & McLaren, 1986), Valli (1990) identifies a "critical" moral approach in teaching according to which teachers' moral role is to

redress societal inequities and injustice, which are reproduced in the structure of schooling, by empowering the least advantaged students and advancing their rights. (For an extension of this approach see chapter in this volume on justice in teaching).

- 2. Hansen (1998, p. 649) suggests that rather than deriving the moral meaning of teaching from external authorities, this meaning can be understood directly from the obligations that characterize teaching, which are learned through practice. For instance, the very nature of teaching, which requires teachers to "serve students' growth and development" or to "treat students respectfully," is not necessarily imposed by moral sources outside the practice.
- 3. It is worth noting, however, that these approaches are not inclusive (for an extensive review of other ethical approaches to teaching see Oser (1994), and the chapter on justice in teaching in this volume) nor necessarily reflect conceptions embedded in educational practice itself (Hansen, 1998).
- 4. Similarly to Kant, Robert Nozick (1977) appeals to the idea that people should be treated as ends, not merely as a means. Specifically, he argues that an unequal resource distribution is just, so long as it is the result of free exchanges between *consenting adults* and it was made from a just starting position. On this basis, Nozick challenges the deontological character of John Rawls' (1971) argument whereby just inequalities in distribution must maximize the benefits of society's least advantaged group. He claims that this argument implies a forced redistribution of income which treats people as if they were merely sources of money (i.e., means).
- 5. See Note 4 above.
- 6. It is worth noting, however, that in the feminist theoretical thought (e.g. Gilligan, 1982; Noddings, 1984, 1988) caring is not defined in terms of virtue but rather in terms of concern for "the human beings involved in the situation under consideration and their relations to each other" (p., 218). In other words, the primary concern is with the other person, not with one's own moral excellence. Moral virtues, such as honesty, courage and perseverance, should be cultivated by teachers not for their own sake, but to make the teachers capable of caring for their students and for their affective growth and self-actualization. For this reason feminists usually regard their ethics of care as distinct from virtue ethics. Since often they also distinguish their approach from the deontologist and consequentialist approaches described in the present chapter (since the latter are not focused on care for others), care ethics has been regarded a distinctive approach (Valli, 1990).

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TEACHER EXPECTATIONS AND LABELING

Christine Rubie-Davies

Teacher Expectations: An Introduction

The importance of teacher expectations in facilitating student learning has long been recognized. All teachers have expectations for their students, as they should. Expectations can facilitate the setting of achievable yet challenging targets for students. The general claim seems to be that where teachers believe that their students can meet targets and they provide appropriate learning opportunities and support, then their students are likely to achieve the goals and improve academic achievement.

The reality of a positive relationship between teachers' expectations and outcomes for students, however, appears to rely on a range of variables including teacher behaviors, teacher characteristics and student characteristics. This chapter will provide a brief history of the expectation research and then focus on the differential behaviors that have been associated with teachers as they interact with their high and low expectation students. This will be followed by an outline of various student characteristics proposed as influencing teachers' expectations. The final sections of the chapter will explore some teacher characteristics and possible relationships with their expectations; these sections will consider how teachers' expectations for some groups of students may result in differential opportunities to learn – the crux of the teacher expectation issue.

A Brief Background to the Teacher Expectation Research

Teacher expectation research began with the seminal work of Rosenthal and Jacobson (1968). Rosenthal (1963) had conducted a number of laboratory experiments where he randomly assigned rats to research assistants who then had to train the rats to go through a maze. For some assistants he told them that their rats were "maze bright" and so they could expect them to learn quickly while he provided the opposite scenario for other assistants and their rats. What he found was that when assistants believed that their rats were smart, the rats did learn to go through the maze more quickly than those where assistants had been told their rats were less intelligent. It seemed a simple leap to apply this research to teachers and their students. The aptly named "Pygmalion experiment" of Rosenthal and Jacobson appeared to show similar

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results. Teachers were told that some of their students were late bloomers and likely to make substantial progress over the year of the experiment. Many of the bloomers did make larger than expected gains.

This research provoked huge controversy with several researchers pointing out flaws in the methodology and in the conclusions drawn (Snow, 1969; Thorndike, 1968). Nowadays though, the arguments about the validity of Rosenthal's conclusions and the adequacy of his methodology have become redundant. This is because there is widespread acceptance of the existence of teachers' expectations and of their importance for student learning. The original study sparked a fruitful area of psychological research that has now spanned four decades.

One explanation that Rosenthal provided for why some of the "bloomers" made larger than expected gains was that when teachers believed some students were smarter than others this led teachers to interact differently with them than they did with students for whom they had low expectations. In turn this gave students messages about what was expected of them and increased the probability that they would respond accordingly. In this way students would fulfill teachers' expectations of them. This phenomenon came to be known as the self-fulfilling prophecy effect.

Expectations and Teacher Behaviors

Rosenthal's proposal led researchers such as Brophy and Good (Brophy, 1983; Brophy & Good, 1974) and Cooper and Good (Cooper, 1979; Cooper & Good, 1983) to begin examining the types of behaviors that teachers exhibited with high and low expectation students. They showed, for example, that teachers gave more wait time to high than low expectation students, they criticized lows more frequently than high expectation students, they praised highs more frequently than low expectation students for success even though the latter occurred less often, and they interacted more frequently with high expectation students in public and lows in private.

Brophy (1998) contended, however, that unlike the experimental study of Rosenthal mentioned above and others that followed, in an ordinary classroom situation, teachers' expectations were generally accurate and based on relevant data. Because of this he suggested that the self-fulfilling prophecy effects of teachers' expectations would mostly be small (making around a 5–10% difference to student achievement). Brophy also suggested that some teachers may discriminate to a greater extent in their behavior and instruction toward high and low expectation students than would others, leading to greater expectation effects. This may explain why other researchers have reported large expectation effects for some teachers (Blatchford, Burke, Farquhar, Plewis, & Tizard, 1989; Rubie-Davies, 2006b); the size of the expectation effects may be dependent on what types of teachers are included in the study. Some researchers have shown that there appears to be a minority of teachers who form and adhere to inaccurate expectations and interact with students accordingly (Babad, 1998; Weinstein, 2002). But why would teachers form inaccurate expectations and then maintain them? Are there particular student characteristics that could influence teachers' expectations?

Student Characteristics and Teachers' Expectations

A large range of student characteristics have been explored in an attempt to uncover the factors that can influence teachers' expectations. These include: ethnicity, social class, gender, diagnostic labels, physical attractiveness, language style, personality and social skills, teacher/student background, names, and other siblings. Some of these characteristics have been found to have greater and more enduring effects on teachers' expectations than others. For example, the literature related to teachers' expectations and gender is well-publicized and suggests teachers have higher expectations for girls in reading and for boys in math and science (Qing, 1999). What this might mean in practice for students in a classroom is that boys may be given more challenging and faster-paced work in math and girls may be actively discouraged from taking advanced math courses, despite similar achievements on standardized testing. Such teacher practices mean that girls and boys are given differential opportunities to learn. In an experimental study, Page and Rosenthal (1990) found that teachers altered the pace of their lessons and the quantity of concepts they included depending on whether their students were male or female and whether the lesson was a math or a vocabulary task. So math lessons were faster paced and contained more input when the students were male while the opposite was true for the vocabulary task. The result of differential instruction was that boys learned more in math and girls more in the vocabulary task. Page and Rosenthal reported similar predictable results for Asian and white students, with Asian students and especially Asian boys being taught more concepts and more difficult concepts in a lesson than were the other groups (Asian girls, White boys, White girls) despite similar initial achievement.

The question of whether teachers form expectations based on student ethnicity has been hotly debated. Research conducted in the United States and comparing teachers' expectations of African-American and white students does suggest a small positive teacher bias toward white students (Jussim, Smith, Madon, & Palumbo, 1998) but the issue of whether teachers use ethnicity in forming their expectations has not been fully resolved. Similar research conducted in New Zealand showed that teachers had substantially higher expectations of White, Asian and Pasifika students than they did of Maori students (Rubie-Davies, Hattie, & Hamilton, 2006). This was despite Maori students achieving at similar levels to the other ethnic groups at the beginning of the study. Teachers also judged Pasifika students to be achieving at similar levels to White and Asian students whereas their performance was significantly below that of both those groups. Anecdotal evidence suggested that teachers thought Maori students came from homes where education was not valued and where students were poorly supported. In contrast teachers felt that Pasifika, White and Asian parents had high expectations for their children and became involved in their education. This evidence suggests that ethnicity may be one basis for teachers' expectations. It also alludes to stereotyping being a contributing factor to some teachers' expectations. This will be discussed further in a later section.

The two student characteristics that researchers generally agree have the greatest impact on teachers' expectations are student social class and diagnostic labels. Dusek and Joseph (1985) suggested that particularly for lower class students, teachers formed

their expectations based on the students' social standing rather than on their academic performance. In a classic study by Rist (1970) he reported that in a first grade class he observed the teacher purported to group her students by ability whereas the students had actually been grouped by social class. The teacher then proceeded to seat the low "ability" group furthest from her and interacted more frequently and warmly with the children in her high "ability" group. It appears that time has not altered the findings from earlier studies. Reports that expectations for middle class students are much higher than they are for lower social class students (around a half a standard deviation higher) continue to be conveyed (Jussim et al., 1998).

Similarly the evidence for diagnostic labels has not yet been disputed: teachers' expectations are significantly altered when students are given a diagnostic label. In one study (Stinnett, Crawford, Gillespie, Cruce, & Langford, 2001) 144 preservice teachers were given a vignette of a child. The scenario was the same in every vignette except that some of the preservice teachers were told the child in the vignette was ADHD or the child was given no label. They were also told that the child was either on Ritalin or in Special Education. Where the child was unlabeled but the preservice teachers had been told he was either on Ritalin or in a Special Education placement, they judged the child to have more behavioral problems if he was said to be taking Ritalin rather than if he was said to be in the Special Education placement, despite no differences in the description of the behavior depicted in the vignette. Moreover if the child was labeled ADHD then he was judged to have more attention difficulties when in the special education placement than if he did not have the label. Remembering that the descriptions in the vignette were constant and that the only thing that differed in each instance was the label, the researchers concluded that this experiment had shown the powerful effect of labels on teachers' expectations.

Physical attractiveness, names, and other siblings are further student characteristics that have been investigated in relation to teachers' expectations. While all have been found to have some initial effects, there are few long-term consequences for teachers' expectations. For example, when teachers are presented with photos of their class before meeting the students, they will tend to have higher expectations for more attractive students but once they have met their students and become familiar with their academic performance the initial teacher expectations will alter in line with student achievement (Jussim et al., 1998). Similarly, a teacher may hold particular expectations for a student based on knowledge of an older sibling (perhaps previously taught by the teacher) but again expectations appear to quickly alter in line with classroom performance (Dusek & Joseph, 1985). Likewise, some teachers form expectations of students based on names. For example if a teacher had previously taught one or more students called Toby and had had particular difficulties in managing his behavior, when presented with a class list showing the teacher will have another "Toby" s/he may form initial low expectations of the student. But, again, these expectations may alter when this "Toby" turns out to be an engaged and hardworking student (Dusek & Joseph, 1985). Interestingly Dusek and Joseph reported that the effect of names was pertinent to experienced teachers but not inexperienced ones. There is a caution here, though, in that if the teacher's initial expectations are portrayed strongly and consistently to "Toby" he may

(re)act accordingly – the self-fulfilling prophecy effect. In the same way a self-fulfilling prophecy effect could also emerge in the case of higher expectations for more attractive students, and for the sibling of a former student but such effects are not commonly reported for these student attributes.

Further student characteristics that have been investigated infrequently, and so the evidence is not substantiated one way or another, include language style, personality and social skills, and teacher/student background. For these characteristics, some researchers (Dusek & Joseph, 1985) suggest that teachers have lower expectations for students whose language patterns do not match their own, for students with poor social skills and less engaging personalities, and for students who do not come from similar social backgrounds to themselves. There have, however, been too few studies examining these characteristics to draw any conclusions.

Bias and Stereotypes Among Teachers

It would seem likely that some teachers will be more readily influenced by student characteristics than others. This may be because some teachers have a pre-conceived bias toward, or they adhere to stereotypes about, certain groups in society. The findings of Rubie-Davies and her colleagues cited above (Rubie-Davies et al., 2006) suggest that teachers may have held lower expectations for Maori students than for Pasifika, European and Asian students because of stereotypical beliefs held about Maori families, i.e. that Maori parents did not value education. Other New Zealand researchers have reported teachers believing that Maori homes are less supportive of education than New Zealand European homes, that Maori students come from more deprived home backgrounds and that parents do not assist their children with homework (St. George, 1983). If teachers are swaved by stereotypes of particular groups what may be communicated to students is that some students are considered "better" than others and therefore may gain more positive attention and input from the teacher. Jussim, Eccles, and Madon (1996) have argued that some students are more resilient than others and less swayed by teachers' expectations. However, they poignantly show that it is the students most in need of teacher support who are most vulnerable to teacher expectations. These include minority group students, students from low socioeconomic backgrounds and girls. Students belonging to more than one of these groups are especially susceptible to biasing effects by their teachers. What tends to happen when teachers have low expectations for disadvantaged groups is they teach them less, when arguably they should teach them more. Students may be given less responsibility for their learning, fewer intellectually stimulating tasks and reduced opportunities to work collaboratively with peers.

The potentially damaging effects on student learning when teachers embrace stereotypes about particular groups were shown in a British case study (Huss-Keeler, 1997). The researcher reported that the teacher involved in her study believed Pakistani parents were not interested in their children's education. An example provided to support this belief was that Pakistani parents rarely attended parent and report evenings. Yet when the researcher questioned the Pakistani parents about their lack of involvement in school activities their non-attendance was reported as mostly due to all invitations being sent to homes in English and the Pakistani parents not understanding English. The teacher regularly allowed her first year students to take home books from the class library so they could practice their reading skills. This opportunity was not afforded to the Pakistani students, however, because of the teacher's belief of a lack of concern about education by their parents. Her view was the students would not take care of the school books and they would not return them. This study is a startling reminder of the possible outcomes for students when teachers hold stereotypical beliefs. In this classroom the students who most needed additional opportunities to learn were instead being further disadvantaged by being deprived of potentially valuable learning experiences.

In a more recent study McKown and Weinstein (2008) provided evidence that only some teachers allow student ethnicity to influence their expectations. They found that in classrooms where students perceived large degrees of differential treatment toward high and low achieving students, teachers had much higher expectations of Asian and European students (between 0.75 and 1.00 standard deviations higher) than they did of African American and Hispanic students when students with similar prior achievement were compared. Conversely in classes where students perceived little discrepancy in the ways that high and low ability students were treated, teachers had comparable expectations for all students with equivalent attainment, regardless of ethnicity. This study suggests the importance of considering teacher characteristics when endeavoring to unravel the intricate relationships between students and their teachers' expectations.

Teacher Characteristics and Expectations

The results of several studies have suggested there may be a relationship between teacher characteristics and expectations. Nevertheless there are few researchers who have concentrated on this important area of teacher expectation research. In an early experimental study (Babad, Inbar, & Rosenthal, 1982) the researchers gave teachers false information about some of their students. They randomly labeled some students high-achieving and others low-achieving in physical skills and then observed the teachers interacting with their students. They identified two types of teachers they called high and low bias teachers. The high bias teachers appeared to assimilate the information they had been given about performance, used this to form their expectations and interacted with students accordingly regardless of actual performance, criticizing students labeled "low achievers" and encouraging the "high achievers." The expectations of the low bias teachers on the other hand, were not so readily altered. These teachers continued to interact with their students based on current performance rather than on prejudicing information.

In subsequent studies, Babad and his colleagues (Babad, 1990; Babad, Bernieri, & Rosenthal, 1989, 1991; Babad & Taylor, 1992) showed that the ways in which high bias teachers interacted with their students were palpable. When 10-year-old students (and other teachers) were shown 10-second video clips of high bias teachers

interacting with students, the observers could readily identify whether the student the teacher was talking to was a high or low expectation student. This identification could be made even though only the teacher could be seen in the video, not the student. Moreover similar correct recognition was made when the teacher was talking *about* a high or low expectation student rather than interacting with one, and in a subsequent experiment with student viewers who did not speak the language of the high bias teachers, non-verbal cues enabled a further group of 10-year-olds to correctly identify who the teacher was interacting with. These studies revealed the magnitude of not only the verbal messages some teachers give to students, but also the strength of non-verbal interactions in providing students with clues about their teachers' expectations. Babad (1998) has argued that while teachers have some command of the verbal messages they give, non-verbal communication is much less easily controlled.

Weinstein and her colleagues (Brattesani, Weinstein, & Marshall, 1984) identified teachers she called high and low differentiating. These were teachers who discriminated to a greater or lesser extent between their high and low expectation students. Weinstein showed that students' academic achievement differed substantially depending on whether the children were placed in the classes of high or low differentiating teachers. High differentiating teachers espoused a fixed view of ability, placed students in fairly inflexible ability groups, discouraged peer interactions, clearly differentiated between the instructional activities of high and low ability students, stressed performance goals, and used largely negative behavior management techniques. The low differentiating teachers on the other hand held incremental notions of intelligence, mainly used interest-based grouping, emphasized task-mastery goals and created positive relationships with and between students (Weinstein, 2002).

Recently Rubie-Davies (2006b) identified teachers she termed high and low expectation teachers. These were teachers who at the start of the school year, had either high or low expectations for all the students in their classes. At the end of the year students with high expectation teachers had made enormous improvements in reading performance while those with low expectation teachers had made minimal, if any, gains. Moreover while the self-perceptions of students with high expectation teachers improved over the year, the self-perceptions of those with low expectation teachers declined dramatically in the academic areas surveyed. Students appeared aware of their teachers' expectations because when asked to respond to the statements: "My teacher thinks I'm good at math/reading" the patterns outlined in the previous sentence were evident.

The teachers also varied in their pedagogical beliefs and practices (Rubie-Davies, 2006a, 2007). Interviews and classroom observations showed that high expectation teachers appeared to adopt a facilitative approach to teaching while the lows were more directive in their approach. In the classes of high expectation teachers, students mostly completed activities in mixed ability groupings; worked collaboratively with their peers; established well-defined task mastery goals with their teachers (which may have led to students being intrinsically rather than extrinsically motivated); received frequent feedback about their learning; commonly had their thinking challenged and extended through questioning; had their behavior managed positively; and

had teachers who carefully ensured students understood new concepts before beginning learning activities. In contrast, students with low expectation teachers made few decisions about their own learning; were more likely to be extrinsically motivated; mostly worked in ability groups with little opportunity for engaging in peer collaboration outside their ability groups; goal-setting was not a feature of these classrooms; students had less ownership of their learning and less understanding of where they were headed; feedback was uncommon in these classrooms; students mainly answered closed questions that they knew the answers to; behavior was reacted to rather than managed; and the teachers did not spend a lot of time introducing and teaching new concepts; but they did spend considerable time providing students with procedural directions. It appeared the low expectation teachers kept control of what their students learnt, when and how. This was not so evident in the classes of high expectation teachers where students had far more autonomy.

Evidence such as this supports the notion that individual teacher characteristics can influence expectations and, in turn, the instructional and socioemotional climate teachers create and the ways their expectations are operationalized in the classroom. It is likely teacher expectations do not simply translate into teacher behaviors during dyadic interactions with students. Teacher expectations are likely to be more pervasive and to translate into the instructional and socioemotional climate of the classroom and so to the learning opportunities students are afforded.

Teacher Expectations and Opportunity to Learn

The expectation research has mostly concentrated on the proximal behaviors of teachers and the instructional environment has been considered only occasionally (Rubie-Davies, 2007; Weinstein, 2002; Weinstein & McKown, 1998). Proximal behaviors are the individual interactions that teachers have with their students and include aspects such as leaning toward high expectation students, smiling at them more and providing them with more wait time following questioning. The instructional environment, on the other hand may be thought of as the contribution of the whole class teaching environment to student learning. For example, when teachers group and seat students are given some responsibility for their learning rather than the teacher making all decisions, or when teachers make high level questioning a feature of their practice, such teacher instructional practices have implications for all students within each class-room. They are class level factors and contribute to the instructional environment.

Little research has been conducted that investigates the relationship between teacher expectations and the socioemotional environment of the classroom. This is despite a meta-analysis by Harris and Rosenthal (1985) over two decades ago which identified the relative importance of 31 identified teacher behaviors across 136 studies. They showed that the interactions of teachers with their students, such as wait time and praising high expectation students more were less important in communicating teachers' expectations than were less tangible interactions such as creating a warm socioemotional climate and teaching high expectation students more concepts

or more difficult concepts (instructional environment). The results of this synthesis implied that factors contributing to the instructional and socioemotional climates of the classroom may have greater implications for students than individual teacher–student interactions which have been the focus of research more regularly. In other words, whole class factors were more important than individual teacher–student exchanges. This is probably because students spend more of their time as class members (experiencing teacher interactions, opportunities to learn, and the overall instructional and socioemotional climates of the classroom) than they do as individuals in direct exchanges with the teacher. Moreover instructional decisions such as how students will be grouped for instruction, how concepts will be introduced and the types of questions that will be asked of all students possibly have greater implications for student learning than individual teacher–student interactions which per student are infrequent in the daily classroom. The instructional and socioemotional climates of the classroom are pervasive, impacting on students and their learning throughout everyday spent in each classroom.

As illustrated above Weinstein (2002) and Rubie-Davies (2005, 2007) have shown differences in both the instructional and socioemotional environments of the classroom for particular types of teachers. Both researchers found differences in teachers led to dissimilarities in the whole class environment and in differential opportunities to learn. Students are likely to be more successful in classrooms where they feel valued, respected, where they maintain their dignity, where they feel that their teacher cares about them and where they have some autonomy in their learning (Ennis, 1998; Reeve & Jang, 2006). These classroom environment factors were more evident in the classrooms of high expectation and low differentiating teachers than they were in the classrooms of their counterparts. The model below (Fig. 1) illustrates the important role the teacher plays in determining student outcomes through the opportunities to learn that are provided.

Teachers form expectations for their class or for particular students based on information they receive about previous student performance. Their expectations will be influenced by their beliefs about how students in general learn as well as beliefs about the particular students in their class and what their learning needs might be. At this point the teacher is making decisions about why students will learn what s/he wants them to learn. Based on the teacher's expectations and their pedagogical beliefs the teacher will plan and provide opportunities for student learning. The teacher decides what the student will learn. These learning opportunities can enhance student achievement and progress but may hinder or retard improvement. The teacher then will choose the pedagogical practices that will be used to deliver the opportunities to learn. So, at this point decisions are made about how the opportunities to learn will be conveyed. For example, some teachers alter their instructional practices when working in low socioeconomic schools (Solomon, Battistich, & Hom, 1996). They tend to provide a more structured environment than they do in middle class schools, to give students less autonomy, to offer less engaging forms of education and to require students to complete more desk work. Hence expectations, beliefs and pedagogical decisions contribute not only to the instructional environment the teacher creates but also to the socioemotional environment in which learning is framed. This is because,





for example, seating students separately and discouraging interactions, particularly between students of differing ability will create a quite different socioemotional environment to one in which peer collaboration is encouraged and supported. Similarly a classroom in which tight controls are kept on students will foster a different affective environment to one in which students are respected, provided with opportunities for autonomy and given some responsibility for their own learning. Hence in an inextricably woven relationship the instructional and socioemotional environments of the classroom contribute to student academic and social outcomes.

It is recognized that student behavior and academic performance can influence teacher expectations and for a time there was debate in the literature about whether the effect was from the teacher to the students or from the students to the teacher. It is likely this relationship is reciprocal although more recent evidence suggests a stronger effect from the teacher to the students than the opposite (Gill & Reynolds, 1999; Kuklinski & Weinstein, 2001; Rubie-Davies, 2006a). Hence the dotted arrow in the model is designed to reflect the lesser effect of the influence of student achievement and behavioral factors on the teacher than the compounded effects of the teacher factors on the students. In simple terms the power of expectations and their effects in the classroom rest with the teacher more so than with the students.

Summary

This chapter has examined expectations as a function of teacher-student interactions and explored student characteristics that could affect teacher expectations. The most important message is that any effects of teacher expectations tend to be oriented round attributes of teachers rather than with characteristics of students. Teachers differ in their beliefs and the degree to which they assimilate societal stereotypes. They differ in the degree to which they allow student characteristics to influence their expectations and the degree to which they allow their expectations to influence the ways in which teaching is implemented in their classrooms. It is the teacher who structures both the instructional and the socioemotional climates of the classroom. For these reasons it is important teachers set high expectations for all students, use dependable assessment feedback on a regular basis to correct any inappropriate expectations, and use this information to set meaningful and challenging targets for all students. Every student has the right to a quality education and should be given, therefore, the opportunity to make maximal learning gains while in the care of every teacher.

Biographical Note

Christine Rubie-Davies is a senior lecturer in the Faculty of Education at The University of Auckland. An elementary school teacher for a number of years, Christine was the Deputy Principal of a large urban school in a low socioeconomic area before she moved into the tertiary environment in 1998. At The University of Auckland

Christine helped establish four primary teacher education programs developing one of these across two campuses. She now teaches undergraduate and postgraduate classes in educational psychology and was a recent recipient of a National Tertiary Teaching Excellence award in New Zealand. Christine's research interests include teacher expectations, teacher beliefs, the instructional and socioemotional climate of the classroom, student self-perceptions, and ethnic issues as they affect student learning. She is particularly interested in exploring the teacher contribution to student learning. During her leisure time she enjoys gardening and going for long walks with her husband.

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Section 8

TEACHING IN CLASSROOMS

TEACHER-STUDENT INTERACTION

Joshua M. Englehart

Introduction

Many of us, particularly those of us how have chosen education as a profession, can think back to a teacher who was exceptionally influential in our school experience or even in our life's direction. If you have memory of such a teacher, hold his or her qualities in mind...

Now, you probably learned a lot of subject matter from this teacher, and this teacher was likely very knowledgeable, but chances are that these are not the reasons why this teacher made such a difference. Chances are that this teacher's exceptionality lies with how he or she interacted with students. The fact is that a definite thread of similarity runs through teacher preparation programs; teachers generally enter the classroom with comparable training in content and pedagogy. The way that teachers interact with their students is a prominent factor in differentiating one from the next in terms of impact.

Individual personality plays a sizeable role in determining a teacher's particular style of interaction in the classroom. Nonetheless, an awareness of important aspects of interaction can guide one in becoming the kind of teacher who influences the lives of students beyond simply matters of subject matter. In this chapter, I will detail three of such aspects – basic styles of teacher-student interaction, the importance of positive interaction, and barriers to effective interaction.

Teacher Styles of Interacting with Students

Teachers range from very nurturing and parental to downright confrontational in their modal styles of interacting with their students. Some view the student as an autonomous actor who has a role and responsibility in the teacher-student relationship and choices to make in their learning, while others tend to see students as being in need of strict structure and control in order to navigate the schooling process. One's style is the product of how responsive to individual needs one is along with how much authority he or she demands.

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching, 711–722.* © Springer Science+Business Media LLC 2009 Based on this idea, Diana Baumrind (1966) describes models of control that adults have in relationship to children. While these models emerged from her work on parenting styles, she notes that they have greatly influenced educators as well. The models have in fact been meaningfully applied to the educational setting (e.g., Barnas, 2000; Hughes, 2002).

The framework presents three primary types of adult control, resulting from different combinations of warmth and control. The first is "permissive," characterized by high warmth and low control. The permissive adult allows the child a great deal of self-regulation and freedom while making few demands with regard to behavior and responsibilities. The second type of adult control is "authoritarian," resulting from low warmth and high control. This combination yields a style in which the adult seeks to shape the behavior of the child in accordance with a defined standard of conduct. The authoritarian is unyielding in his or her expectations and views child autonomy as an unnecessary or counter-productive element in the development of the child.

"Authoritative" is the third type of adult control, the outcome of high warmth and high control. Baumrind's description of the authoritative parent illustrates how this style is much more dynamic than the other two styles:

The authoritative parent attempts to direct the child's activities in a rational, issue-oriented manner. She encourages verbal give and take, shares with the child the reasoning behind her policy, and solicits his objections when he refuses to conform. Both autonomous self-will and disciplined conformity are valued by the authoritative parent. Therefore, she exerts firm control and points of parent-child divergence, but does not hem the child in with restrictions. She enforces her own perspective as an adult, but recognizes the child's individual interests and special ways. (Baumrind, 1966, p. 891)

In relationship to the authoritative adult, the child is aware of enforced boundaries and expectations, but counter to the authoritarian relationship, they are enforced through reason and explanation rather than through expectation of a blind adherence to imposed rules. The authoritarian relationship provides the child with freedom for self-governance, but it is a guided and negotiated freedom different from the basically unchecked freedom to do as one pleases provided by the permissive adult.

It is not difficult to envision how these models of adult control operate in the classroom. In fact, to return to thinking about your own teachers throughout your own schooling, you could probably identify specific teachers for each of the styles. The permissive teacher, perhaps motivated by prioritizing relationships with students over everything else or by having an extremely non-confrontational personality type, hosts an "anything goes" classroom. Expectations for participation and assignment completion are lax and/or student behavior in the class is uncontrolled. In stark contrast, the authoritarian teacher demands, and may even pride himself or herself on, strict classroom order. This classroom could be emotionally very cold and may be quiet most of the time with the exception of the direction of the teacher, who dominates the interaction. Students know that there are certain consequences for any transgressions, and inflexible expectations remain in place for all students without argument. There are differential benefits to students and teachers present in each of these two styles. Students may have a strong affinity for aspects of the permissive classroom. Adolescents in particular crave to opportunity to exercise freedoms and to self-express. As a result, permissive teachers may be well-liked by their students. "Well-liked," however, is not the same thing as "respected." Students actually expect a certain degree of order in the classroom and are dissatisfied with an environment that is excessively disruptive to instruction (Winik, 1996). The teacher must remember that his or her duty is that of a professional educator and not that of a best friend to students. Without some establishment and enforcement of expectations for students, it is difficult to imagine how meaningful learning could take place.

On the other hand, the authoritarian teacher's "no nonsense" approach allows him or her to get right to the business of teaching in a very predictable structured classroom environment. Behavioral problems may be all but nonexistent, there are no concessions regarding what is asked of the student. At the same time, however, the authoritarian classroom can present an unpleasant – even hostile – environment for the student. The teacher may be disliked or feared by the students, making his or her influence on students very one-dimensional, thereby reducing his or her effectiveness. Specific negative consequences of this controlling environment are detailed in the next section.

While the permissive classroom may be enjoyable for the student and the authoritarian classroom may be very easy for the teacher to manage, we must keep in mind that what is important is *what is best for the students and their education*. Thus, interaction which is geared toward making managing the class easier or toward pacifying students without regard for their learning is educationally very suspect. An authoritative style provides an avenue for interaction which serves what is best for students and their education. A teacher who maintains an authoritative stance in interacting with his or her students establishes the boundaries necessary for a respectful relationship and for an effective learning setting while at the same time provides the receptiveness to student wants and needs needed for student comfort and personal development.

The Importance of Positive Interaction

The way that teachers and students interact is a critical factor in determining student outcomes. In a "meta-review" of 30 variables identified as being influential to student learning in the literature, Wang, Haertel, and Walberg (1990) found studentteacher social interaction to be among the top three most important factors. Students identify relationships with teachers as being among the most important parts of their school experience (Alerby, 2003). How a teacher interacts with students translates into products important to education.

I have presented an authoritative style as being the means of interacting with students which best serves the educational needs of the student. Indeed, authoritative parenting has been associated with such positive outcomes as greater independence and social responsibility in children (Baumrind, 1971). Transferred to the classroom setting, students desire an authoritative approach from their teachers; Pomeroy (1999) found the ideal model of teacher-student relationships expressed by students to be "... a unique relationship in which their non-child status is recognized and responded to accordingly while, at the same time, their pastoral needs are met" (p. 477). In what follows, I detail specific ways that teacher responsiveness and student autonomy within a structured environment, the tenets of the authoritative relationship, benefit the student. This positive interaction can give the student a sense of comfort and belonging in the classroom, can enhance student motivation, and can facilitate the student's social development.

Comfort and Belonging

Human beings have a basic desire to form social attachments and a powerful need for belonging. The need to belong is innate, stimulates goal-directed behavior to satisfy it, and consumes considerable cognitive processing (Baumeister & Leary, 1995). Satisfying this need drives much of what we do.

Understanding this is important in the classroom because the psychological need for belongingness takes precedent over learning. This is illustrated in Maslow's (1970) hierarchy of needs. Sense of belonging and esteem are among the basic needs that must be met before higher growth needs, such as cognitive needs of knowledge and understanding, can be met. Thus, when a student does not feel comfortable in the classroom, he or she is less likely to learn.

Teacher-student interaction plays an important role in ensuring the comfort and sense of belonging in the classroom. Teachers have the primary responsibility for pulling students into classroom activities and for establishing the tone and feeling of the classroom atmosphere. The receptive and approachable teacher, versus the domineering or disconnected teacher, is able to make students feel included with positive affect in the class. Conflict-inducing attitudes of teachers have been shown to produce negative psychosomatic and educational effects among students (Sava, 2002), while caring and supportive relationships with teachers have been associated with greater student satisfaction with school (Baker, 1999). In turn, results of positive teacher-student interaction such as sense of community (Battistich, Solomon, Kim, Watson, & Schaps, 1995) and emotional warmth (Voelkl, 1995) in schools are significantly related to student achievement.

The importance of belongingness and comfort in the classroom should not be discounted, nor should the teacher's role in ensuring them. Teachers who fail to establish a welcoming, safe environment may be undermining the ability of their students to learn. Through such acts as personalizing contact with students, conveying respect in all interactions, and being sensitive to student concerns, teachers can set the stage not only for effective teaching and learning, but also for enriching and rewarding relationships.

Motivation

Motivating students to participate in lessons and to engage in the curriculum can be very challenging. Students are so stimulated by entities outside of school such as television, video games, and peer groups that it is difficult to spark their interest with matters

of schooling. At the same time, however, teachers must be aware of the fact that the way that they interact with their students may exacerbate this motivation challenge.

Alfie Kohn (1996) describes the connection between a teacher's style and student motivation in terms of the "doing to" versus the "working with" classroom. In the "doing to" classroom, the teacher directs all activity and focuses on compliance with that direction. In the "working with" classroom, the students' questions and interests drive the activity and the teacher facilitates learning in a collaborative fashion. The "working with" environment "supports children's desire to find out about things, facilitates the process of discovery, and, in general, meets children's needs" (p. 54). In short, providing for student autonomy in the classroom enhances an enduring motivation to take an active part in learning.

A controlling environment conditions students to extrinsic motivators (such as reward and punishment). Controlling environments and extrinsic incentives contribute to feelings of anxiety and helplessness, reduce interest, and are associated with poorer performance (Kohn, 1993). Conversely, autonomy support in the classroom has been shown to be significantly related to student behavioral and emotional engagement (Skinner & Belmont, 1993), and personalization and choice in learning have been associated with large increases in student motivation and engagement (Cordova & Lepper, 1996). When students' interests and concerns are part of the classroom discourse, their natural curiosity and innate drive to acquire knowledge can guide their leaning. These resources are not drawn upon when teachers insist on directing all activity and on manipulating what students do through behaviorist methods.

Teachers should interact with students in such a way that they allow them to experience competence and autonomy. Teachers accomplish this through such practices as allowing input and choice in class activities and by letting students know that their contributions are meaningful. Such practices require that the teacher operate from a philosophical position of accepting that students are not only able to, but best served by, playing a part in the direction of their own education.

Social Development

Schools serve not only the cognitive, but also the social development of students. It is true that peers play a prominent role in this socialization. Nevertheless, teachers can hold important influence as well.

The first way in which teachers influence the social development of their students, as was just discussed with motivation, is by acting toward them in a non-controlling manner. DeVries and Zan (1994) explain how controlling atmospheres lead to feelings of helplessness among students, while accepting, respectful, and stimulating atmospheres lead to feelings of effectiveness. The views that children are to respect adults by virtue of their position and that adults are supposed to wield their power results in disrespectful attitudes toward students in schools. The outcome is the powerful "hidden lesson" in the curriculum that one is to be unquestionably submissive to those with power. This lesson retards socio-moral growth due to its teaching that

interpersonal understanding is insignificant because it is some external structure, not the way that people act toward one another, that determines relationships.

Again, teacher-student interaction should be characterized by some degree of giveand-take. When students are recognized as having important contributions in school, they come to know that discourse and negotiation are valued skills, and they will have opportunities to use them. Here, the lesson embedded in the curriculum is one that can expand the possibilities of the student even beyond the school setting. Here, the student is better able to acquire the interpersonal skills necessary for success in the adult world.

The second way that a teacher can facilitate student social development is by acting as a model for desirable social behaviors. Adult modeling is important in childrens' acquisition of appropriate social skills (e.g., Kahn & Cangemi, 1979). Children learn not only basic conventions like conversational "rules," but also higher, more complex capacities such as acceptance and conflict resolution, from the adult models around them. Where teachers are the adults present throughout much of the time of a student's most sensitive developmental years, they can make a sizeable difference in the social lives of students by serving as either positive or negative behavioral models.

Students see teachers at their best, and they see them at their worst. Teachers must recognize that their actions have effects beyond the utilitarian purpose for which they were enacted. Teachers who fail to manage their emotions and externalize anger and frustration in public display are not only missing an opportunity to model a socially desirably response, but are also modeling an undesirable response in its place. When teachers respond to conflict in a calm, rational manner, respectfully acknowledge disagreement, and welcome multiple points of view, these behaviors can "rub off" on the student, making him or her more able to confront the complexities of human relationships.

Barriers to Positive Teacher-Student Interaction

Obviously, teacher-student interaction does not take place in a vacuum. It occurs within a particular socio-cultural ecology which can be extremely complicated. Certain elements within the school setting pose challenges to the establishment of the positive interaction style which has been discussed. Among these are classroom management concerns, teacher expectations, large class sizes, and the environment created by testing and accountability mandates. Little may be able to be done to alter the school environment itself. This being the case, an awareness of elements which can compromise positive teacher-student interaction and how they might be dealt with is necessary if the benefits of such interaction are to be brought to fruition.

Classroom Management Concerns

Classroom management is a primary concern among teachers (Merrett & Wheldall, 1993). Student misbehavior can not only be exceedingly disruptive in the classroom,

but can put considerable stress on the teacher. Teachers will compromise their lessons, and even change their curricular content (Ennis, 1996) so as to avoid anticipated problem behavior by students.

Something that many teachers also do in an effort to minimize off-task behavior is to adopt a very stern, strict, authoritarian stance toward students. In doing so, the teacher can maintain a rigidly predictable environment and control students with intimidation. Again, where this might make teaching easier, it is not the best thing for the students.

It is important to recognize, however, that authoritarianism is not the only avenue for managing classroom behavior. Jones and Jones (1998) identify positive teacherstudent relationships and "classrooms as communities of support" as being critical components to classroom management. When student emotional and psychological needs are met, students are less likely to be problems in the classroom. For example, off-task behavior has been found to decrease with increases in encouragement provided by teachers (Rathvon, 1990). Thus, not only can warmer and more caring interaction better serve students, but it can actually enhance classroom management.

Teacher Expectations

The educational literature presents several examples of how teacher-student interaction has been shown to differ depending on certain student characteristics. Teachers have been shown to act differently toward students based on student gender (Drudy & Chatháin, 2002), race (Cornbleth & Korth, 1980), socioeconomic status (Goddard, Tschannen-Moran, & Hoy, 2001), and academic ability (Ilatov, Shamai, Hertz-Lazarovitz, & Mayer-Young, 1998). Differences in the way that teachers interact with different students have been linked to the expectations that the teacher holds of the student (Brophy & Good, 1970). This is not to say that teachers are overtly racist or sexist, or would subscribe to the ideology that any person should be treated unfairly based on a particular personal characteristic. However, prejudice to some degree can operate on a sub-conscious level, through implicit attitudes and beliefs, whereby expectations can be built into one's perceptions (Dovidio, 2001). Here, a person's characteristics carry with them an unintentional bias which determines what qualities one expects that person to possess. Prejudice is not conveyed through aversive behavior, but rather through subtleties of interaction such as interpretation of messages and expectations. This means that teachers may have prejudiced expectations of students absent intention or awareness of the fact. In turn, these teachers may not be aware of disparate interaction patterns that result.

Awareness is the obvious remedy to this problem. As Brophy and Good (1974) write, "once teachers are made aware of inappropriate teaching on their part, the vast majority are willing and eager to change" (p. 270). These authors found that teachers altered their interaction patterns considerably after an outside observer made them aware of differential interaction which coincided with their expectations of different students.

While teachers may not have resources available to inform them of their practices, simply having an awareness of how implicit conceptions influence expectations and

how expectations influence interaction provides teachers with the means for ensuring that student characteristics do not determine their interaction patterns. Where the assumption is that the teacher would not knowingly and intentionally act prejudicially toward students, this awareness can guide one in changing behavior toward students where necessary and, ideally, can expose underlying assumptions which result in differential student treatment.

Large Class Size

One of the arguments for class size reduction is that class size influences teachers' interpersonal styles – teachers get to know their students better and tolerate a greater range of student behaviors in smaller classes (Finn, Pannozzo, & Achilles, 2003). The class size literature provides examples of how teacher-student interaction is more positive in small classes. Teachers know their students better (Zahorik, 1999), are better able to meet student academic and non-academic needs (Reagin, Reinshuttle, & Reynolds, 2001), ask more questions (Ozerk, 2001), and have more sustained interactions with students (Hargreaves, Galton, & Pell, 1998) when class sizes are smaller.

As class size increases, challenges to maintaining positive interaction between teachers and students mount. The more students who are placed in a class, the less opportunity the teacher has for contact with students on an individual basis. This makes it more difficult to allow students to feel included and supported. Additionally, larger group sizes are more difficult to manage. A large class means that more students are proximally distant from the teacher at any given time and that the teacher's monitoring attention is diffused among more individuals. These factors can exacerbate classroom management concerns and cause one to compensate with more authoritarianism.

Nonetheless, the problem of controlling class sizes is something with which many school districts must deal. Teachers are charged with the responsibility of finding ways of overcoming the negative effects of large class sizes. In terms of maintaining positive teacher-student interaction, one way of achieving this is utilizing alternatives to whole-class instructional groupings. Alternative arrangements can break the class-room into more manageable segments. By incorporating such designs as cooperative learning and small-group instruction (e.g., Fogarty, 1990; Johnson & Johnson, 1999), not only is the teacher more able to interact individually with students, but also the students are more able to participate in classroom activities, which can circumvent many problem behaviors by better engaging students. Such alternatives can yield these benefits in any classroom, but they are especially important in large classes.

High-Stakes Testing

Standardized testing and accountability measures have generated many concerns among teachers. Such measures, which not only determine student placement but are also used to evaluate school effectiveness, affect curriculum and pedagogy (Anders & Richardson, 1992). One of the ways that the effects of such measures are borne out in the classroom is in the way that teachers and students interact. High-stakes testing "compels teachers to spend valuable time preparing children to take tests and teaching to the test, undermining what otherwise could be sound, responsive teaching and learning" and "discourages social and intellectual development, such as cooperation, creativity and problem-solving skills, as time is spent on learning exactly what appears on the test" (Haladyna, Haas, & Allison, 1998). When so much importance is placed on how students score on a single test, quality classroom participation, student intellectual interests, and deep discussion become subordinate to teaching to that test. As Sacks (1999) writes:

When schools teach to a test, the test becomes the nearly exclusive focus of teachers' and students' attention. "Science," and its teaching and learning, for example, therefore becomes a series of test items, usually in the format of multiple-choice questions. The very nature of learning, as an open-ended, somewhat uncertain, spontaneous, creative, and complex process, is turned upside down.

The teaching promoted by high-stakes testing is of a less personal, less interactive style. Content coverage, not student needs, becomes the focus. However, testing and accountability have become part of the normal landscape of education – undesirable conditions which accompany them are not likely to go away any time in the near future. The challenge is how to provide the personal interaction that students need while still preparing them for the test; the problem is that test preparation is too often prioritized over personal interaction. The solution lies with resisting the assumption of the exclusivity of these choices.

It may be the case that teachers must compromise content coverage in terms of breadth and depth in the name of test preparation. Within these curricular constraints, however, teachers can still deliver instruction with attention to quality interaction. For example, Taylor and Walton (1997) found that improved test scores can accompany student-centered instruction when students are provided with a series of test-preparation workshops. Here, a relatively small amount of time practicing the mechanics of taking multiple-choice tests replaced teacher reliance on drill and lecture and preserved the opportunity for quality teacher-student interaction in the classroom. This is an approach that may work well for some schools, while others may need to search for additional creative solutions. Creative solutions are found when teachers identify the specific needs of their students in terms of preparing for the test (i.e., topic breadth/depth, practice with test format, specific mode and sequence of instruction) and balance those needs with the students' needs for personal interaction. Thus, no "cookie cutter" approach is available that will work for all students in all schools, but balancing effective test preparation with quality interaction is important task and a necessary endeavor if students' complete educational needs are to be met in this time of high-stakes testing.

Another negative impact of high-stakes testing may be even more difficult to remedy. The implementation of these tests has also undermined the morale of both students and teachers (Nichols & Berliner, 2007). Amid the stress imposed by being expected to meet testing standards, students may respond by disengaging from the process altogether. Such students might hold oppositional attitudes toward school and their teachers. Within the test-driven accountability system, teachers may feel a loss of autonomy and professional respect, with so many of their decisions regarding curriculum and instruction being dictated to them. Given an environment of obstinate students and unhappy teachers, it is easy to envision how teacher-student interaction could be drastically compromised. This ugly byproduct of high-stakes testing appears to always be a possibility so long as school communities do not fully "buy in" to this accountability system.

Summary

Teachers often find themselves trying to walk a fine line between controlling their classrooms and providing their students with enough freedom to be happy and comfortable. Depending on where teachers' values lie, they end up taking a position somewhere on a continuum between these two elements. Their position becomes manifest in how they interact with students. Those who gravitate far toward the control end of the spectrum may create a psychologically cold atmosphere not conducive to the child's development. Those situated too close to the freedom end can produce an environment lacking the structure necessary for teaching and learning to take place.

Navigating control and freedom is certainly not an either-or proposition. Teachers can incorporate both elements into their interaction style, and doing so best serves the needs of the student. Teachers who responsively interact with students such that the students are given autonomy within a structured and respectful setting can contribute significantly to the personal growth of the student. Within such a relationship, teachers can enhance the motivation and social development of students, while students will feel more comfort and belongingness in the classroom.

One's personality style is obviously a contributor to how he or she interacts with students, but external conditions can shape interaction as well. Classroom management concerns, large class size, and the pressure of accountability through standardized test scores can influence teachers to be more controlling in their relationships with students. These are challenges, however, that can, and should, be overcome in the interest of what is best for students and their education.

Biographical Note

Josh Englehart is a health teacher at Riverside High School in Painesville, Ohio, U.S.A. He received his PhD in Urban Education from Cleveland State University. Josh's primary research interests include class size, student motivation, and gender socialization.

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ASSESSMENT AND EXAMINATIONS

Susan M. Brookhart

Introduction

Teachers spend a great deal of their time in assessment or assessment-related activities (Stiggins & Conklin, 1992). This chapter describes the nature of assessment in class-rooms and addresses two questions.

First, how do teachers determine whether students have mastered a body of knowledge? Teacher-made or teacher-selected classroom assessments take many forms, including paper and pencil tests and quizzes, performance assessments, oral questions and discussion, and portfolios. Some classroom assessments are used formatively in the learning process, and others are used summatively to assign marks or grades.

Second, what is the role of standardized testing in schools? Administrators use standardized test information for accountability reporting and for evaluation. Teachers may use standardized test information for grouping, planning instruction, or other formative purposes. Standardized testing can have major consequences for the content and pacing of classroom instruction if the stakes are high. Uses of standardized testing differ from country to country.

The approach taken in this chapter was to present a broad sweep. The literature review was selective, not exhaustive. Both sections are overviews, not complete expositions, of their topics. The first section draws a general picture of assessment in classrooms, summarizing over much variety and detail. The second section introduces some issues about the current role of standardized testing and uses information from selected countries as illustrations of the variety surrounding these issues.

Classroom Assessment

How do teachers determine whether students have mastered a body of knowledge? In two words, by using classroom assessments (Brookhart, 2004a). This section discusses the nature of those assessments.

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Types of Classroom Assessment

The purpose of most classroom assessment is to determine student progress towards or mastery of classroom learning goals. Most classroom assessment methods are criterion-referenced, that is, achievement is measured against standards of accomplishment, although the criteria are not always clear (Mavrommatis, 1997). This represents a change from older methods, which were much more likely to be norm-referenced, that is, achievement was measured by comparing students to one another. In some countries this change happened gradually and voluntarily, and in others it has been an intentional reform (Bethell & Mihail, 2005; Chilala, 2003; Cumming & Maxwell, 2004; Howie, 2001; OECD, 2005; Pryor & Akwesi, 1998). This is in contrast to standardized testing (below), where achievement is often norm-referenced, that is, measured against the performance of other students.

Gipps, McCallum, and Hargreaves (2000, p. 68) categorized the kinds of assessments primary teachers do: using other teachers' records; using written tests; observing; questioning (two types, oral testing and delving); getting a child to demonstrate; checking; listening; eavesdropping; marking; making a mental assessment note; gauging the level (three types, assessing general level of understanding, judging individual progress, and looking at a range of work to make a judgment of U.K. National Assessment levels); and working out why a child has or has not achieved. Their analysis indicated some of these strategies were used to assess knowledge and understanding, some to assess students' use of learning strategies, and some to assess both. Assessment of students' knowledge and understanding is important for both formative and summative assessment (see below), and assessment of students' learning strategies is important for formative assessment.

Use of Classroom Assessment Information

The use of different types of classroom assessment changes with grade level and subject. Elementary teachers use more varied assessment methods than secondary (Gipps et al., 2000; Gullickson, 1985; Wilson, 1990), including a large range of methods and "academic enablers" like effort and improvement (Cizek, Fitzgerald, & Rachor, 1995; McMillan, Myron, & Workman, 2002). Primary level teachers use observation extensively (Adams & Hsu, 1998; Nicholson & Anderson, 1993).

Secondary teachers use fewer commercially prepared tests and more teacher-made tests, often more objective tests (Gullickson, 1985; Stiggins & Bridgeford, 1985; Stiggins & Conklin, 1992; Wilson, 1990; Zhang & Burry-Stock, 2003). They consider "academic enablers" like effort and improvement to be achievement-related constructs; this varies with ability level of class (Cizek et al., 1995; McMillan, 2001). Secondary social studies teachers use constructed response items more than other teachers (McMillan, 2001). While recall questions are dominant, whether teachers write tests (Marso & Pigge, 1993; Stiggins, Griswold, & Wikelund, 1989) or whether they are from textbooks (Frisbie, Miranda, & Baker, 1993), teachers do sometimes use questions that tap higher-order thinking (Gullickson, 1985; Kahn, 2000; Stiggins et al., 1989). The sections below describe characteristics of these different methods.

Teachers prefer classroom assessments to external, formal assessments because they are "immediately accessible, proximal in intended purposes to the tasks teachers must accomplish and 'content consonant'" (Mavrommatis, 1997, p. 384). Teachers like the fact that classroom assessments match classroom instruction and learning targets. That, after all, is the main purpose of having children in school. In contrast, external assessments seem more distant and less relevant to the classroom in which they live and work (Guskey, 2007; McMillan, 2001; McMillan et al., 2002).

Quality of Classroom Assessment Information

The quality of classroom assessment information is variable (Stiggins & Conklin, 1992). Reliability and validity are the conventional criteria for the quality of assessment information. Reliability refers to the dependability of the score: accuracy and consistency over scorers, time, and form of assessment. Validity refers to whether the score conveys intended meaning, and whether the meaning is appropriate for intended uses. For standardized tests, these criteria are usually assessed with large-sample empirical studies.

Teachers are not knowledgeable about what measurement specialists would consider relevant reliability and validity principles (Campbell & Evans, 2000; Impara, Plake, & Fager, 1993). For this reason, some studies have concluded by calling for more teacher training in assessment. Others, while acknowledging the importance of sound assessment training, have also called for expanding conceptions of reliability and validity to match better with life in classrooms. In the classroom, methods of establishing validity are more interpretive than statistical (Bulterman-Bos, Terwel, Verloop, & Wardekker, 2002; Moss, 2003), and the criterion of whether the assessment supports good learning (has good consequences, avoids unintended consequences) is especially important. In the classroom, reliability is about deciding what kind of consistency is needed and working towards it (Parkes & Giron, 2006). Two important reliability concerns for classroom assessment are the accuracy of teacher judgments (grading or scoring) and having enough items, tasks, or work samples to draw dependable conclusions about student achievement (Smith, 2003).

Observation and Informal Assessment

Observation and informal assessment are used in two major ways in the classroom (Bulterman-Bos et. al., 2002). For students of all ages, observation helps teachers determine student interests and dispositions, attention to classroom tasks, and deportment. Teachers can respond more appropriately to students if they have good information about these things. A good understanding of students helps teachers create a positive classroom climate for learning. At the start of a school year or a new class, observation and informal assessment helps teachers "size up" and get to know their students (Airasian, 2001).

Observation is also an important method for assessing learning for teachers of primary students (Nicholson & Anderson, 1993). Many of the primary school learning targets are best assessed in this manner (for example, correct use of pencils and

other school materials, or knowing how to hold a book). These observations may be used for formative purposes (helping students learn), and it is also common for observations to form the basis of primary students' grades or reports to parents (Brookhart, 2004b).

Paper and Pencil Tests and Quizzes

Paper and pencil tests and quizzes are the most common form of formal assessment in schools. Paper-and-pencil testing is an effective and efficient way to assess some kinds of school achievement. Many of these tests tap knowledge and recall of facts and concepts, but carefully crafted questions can also assess student application of knowledge and thinking. Test questions can take many forms (Stiggins, 2005; Nitko & Brookhart, 2007), and are usually summarized into two categories: selected response and constructed response questions.

Selected response questions ask students to choose from among response options. They are usually scored as "right" or "wrong." Multiple choice questions, true/false, matching, and short answer ("fill-in-the-blank") questions are common forms. Fill-in questions are often categorized as selected-response items because a "word bank" of possible choices is sometimes supplied, especially for younger students, and if not supplied is usually implied by the vocabulary and terms students have studied during instruction.

Constructed response questions ask students to supply their own answer. Brief open-ended questions, requiring a sentence or two of answer, are common, and can be scored as right/wrong or assigned several score points. Essay questions are also common on classroom tests, especially at the secondary level, and fall into two general categories. Restricted response essays require a paragraph or more to answer. Longer, extended-response essays are sometimes given as tests or as take-home essay assignments or themes. In mathematics, problems to solve can be simple and require one number as an answer, or can include showing and explaining work, which creates a multi-point question analogous to an essay question.

Essay and show-the-work questions are usually scored with multiple points, either by using a rubric or a point-based scoring scheme that assigns certain points for certain aspects of the answer. A rubric is a set of categories that cover the range of quality levels (usually three to six) of work. Each level has a description of work at that level, and scoring is done by matching the quality of the observed work to the description. Rubrics can be holistic, using one rubric to render one overall judgment for the particular assessment, or analytic, using one rubric for each trait to be scored (for example, for a written report separate rubrics might be used for content, organization, and mechanics).

Rubrics can be generic or task-specific, as well. Generic rubrics describe general qualities of a type of work (for example, written essays, or math problem-solving), and can be used for all assignments of that type. Generic rubrics are encouraged for developmental learning targets of this type (Arter & McTighe, 2001). When students learn to aim for the performance described in the rubrics they are also learning to write, or solve problems, and so on. Teachers share the rubrics with students at the time the assignment is made, as part of instruction and in preparation for assessment. Task-specific rubrics cannot be shared with students ahead of time, because they contain references to the answers.

Performance Assessment

Performance assessment in the classroom is assessment of a student process (like setting up a microscope) or product (like a labeled drawing and explanation of what the student sees on a slide). The assessment requires both a task and a judgment-based scoring scheme (Nitko & Brookhart, 2007; Stiggins, 2005). The teacher typically uses a rubric or point system indicating levels of quality, and matches her observation of the process or product to the quality level in order to assign a score.

Performance assessment is not new in schools. It has always been the dominant method of assessment in performance-oriented classes like physical education. In recent times, however, teachers of academic subjects have come to realize that academic "performances" embody many learning goals in a more authentic manner than do paper and pencil tests (Shepard, 2001; Wiggins, 1998). Teachers are now instructed to strive for a judicious mix of paper-and-pencil assessments and performance assessments, with the choice based on the nature of the learning goal to be assessed.

Oral Assessments

A wide variety of oral assessments exists (Stiggins, 2005). In most classes, informal questions and class discussion give the teacher information about students' understanding during the lesson, and this information helps her tailor instruction. This is important formative information.

For some language arts goals, oral performance is a learning goal in itself (for example, reading fluently, or speaking in a foreign language). Oral skills can be assessed with formal performance assessments when a summative judgment of mastery is required.

Portfolios

Portfolios are collections of student work, and student reflection on that work, to serve one of two broad purposes. Growth portfolios are intended to show student progress, as for example a writing portfolio that included student works over the school year, and included several drafts of each work. They are best used for formative assessment, helping students learn and teachers teach. They may be scored, but may also be used only as the basis for formative feedback or student-teacher conferences.

Best work or "showcase" portfolios are intended to show student final or maximum performance, as for example a mathematics portfolio that included several successful examples of each kind of problem the students learned to solve that year and a student description of what they had learned. They are best used for summative assessment, contributing to evaluations of student achievement for reporting. They are typically scored using rubrics.

Some states in the United States have experimented with using portfolios for largescale assessment. The kind of standardization required to make portfolios scorable and comparable across schools and classrooms has proved difficult and cumbersome (e.g., Koretz, Stecher, Klein, & McCaffrey, 1994). The best uses of portfolio assessment are to support learning within classrooms.

Assessment for Grading

In many countries, the need to provide grades or marks on report cards, as summary judgments or *summative* assessment, has been the primary driver for classroom assessment. Summative assessment means gathering and using information about student achievement for "final" judgments – at least, for judgments that are final for a certain point in time.

The overwhelming role of grading in classroom assessment has changed somewhat in recent years (see the section on Formative Assessment below). Nevertheless, the need to provide timely, defensible, meaningful reports of student progress remains one of the important reasons classroom teachers conduct assessments (Wilson, 1990) and limits the kind of assessment teachers do (Schmidt & Brosnan, 1996). This can actually work counter to formative functions: reports "typically reaffirm judgments about achievement rather than develop them, with the result that very little alteration of instruction is made as a result of the evaluation activity" (Wilson, 1990, p. 4).

In the United States, classroom grades are most often arrived at by combining information from classroom tests and performance assessments into a composite grade that describes student performance over a marking period (Brookhart, 2004b). This process of grading itself requires another layer of teacher practice on top of creating, administering, and scoring individual classroom assessments. The teacher must select and use an appropriate method to combine the results of individual assessment into the grade, mark, or report. Grading policies and procedures may be mandated by the local education agency.

Formative Assessment and Teacher Feedback

Uses of classroom assessment that provide information students use to make progress or information teachers use to adjust instruction are called *formative*. Formative assessment is not a new concept, but it has been rediscovered recently and lifted up for its usefulness in supporting both students' cognitive, informational needs for learning and their motivational needs to feel in control of their learning (Black & Wiliam, 1998; Crooks, 1988). Educators in many countries are promoting formative assessment as an educational reform, because of its promise for increasing student achievement, self-regulation of learning, and equity (OECD, 2005). Barriers to its widespread adoption include perceived impracticalities or difficulties in classrooms and tensions or lack of coherence with large-scale assessments (OECD, 2005; Wilson, 2004).

Most recent studies that focus on the student's role in formative assessment cite Sadler (1983, 1989). Sadler (1983, p. 63) saw three steps in the formative feedback loop:

- · attending to goals;
- · devising strategies to reach the goals; and
- · monitoring the discrepancy between actual and desired performance.

The Assessment Reform Group in the United Kingdom was the first to label this "Assessment FOR Learning." Educators around the world have found this term useful and meaningful, and have picked it up. A summary of their "Assessment FOR Learning: 10 Principles" can be found at http://arg.educ.cam.ac.uk/CIE3.pdf.

Drawing on studies in Canada, Denmark, England, Finland, Italy, Scotland, New Zealand, and Australia, the Centre for Educational Research and Innovation identified six key elements of formative assessment (OECD, 2005, p. 44):

- Establishment of a classroom culture that encourages interaction and the use of assessment tools.
- Establishment of learning goals, and tracking of individual student progress toward those goals.
- Use of varied instruction methods to meet diverse student needs.
- Use of varied approaches to assessing student understanding.
- Feedback on student performance and adaptation of instruction to meet identified needs.
- Active involvement of students in the learning process.

Successful formative assessments focus student work clearly on learning targets, allow students and teachers to measure progress against the goal, and offer information useful for improvement. Classroom use of one or more aspects of the formative assessment process lead to reliable increases in achievement as measured by external tests of educational outcomes: at the primary level (Meisels, Atkins-Burnett, Xue, & Bickel, 2003), at the elementary level (Newmann, Bryk, & Nagaoka, 2001), and at the high school level (Wiliam, Lee, Harrison, & Black, 2004).

Feedback that measures progress against a goal can come from the students themselves, their peers, or teachers. To be most useful, teacher feedback should be a description of student work against the criteria for good work, in terms that students understand. Feedback should be focused on the work itself and on the process the student used to produce the work (Hattie & Timperley, 2007). Feedback should be frequent and timely (Bangert-Drowns, Kulik, C., Kulik, J., & Morgan, 1991) and aimed at a middle level of generality (Kluger & DeNisi, 1996) – not too narrowly focused on tiny details, but specific enough to specify improvement. It should contain suggestions for what to do next (Butler & Winne, 1995; Tunstall & Gipps, 1996).

Cultural differences can affect formative classroom assessment practices. Raveaud (2004) studied formative assessment in two countries. Feedback took a curative approach in France, a preventive one in England. In France, the model for good work was adult work, and student "mistakes" were seen as an inevitable part of learning that should be pointed out. In England, the model for good work was children's work, and students' imperfect works were seen as development. In Nigeria, Ojerinde and Okwonko (n.d.) observed that teachers often use the threat that information will be "on the examination" to control students' academic and affective behaviors.

Effects of Assessment Information on Student Motivation

The same feedback information that is required in order to support classroom learning also helps support student motivation. This "double barreled" (both cognitive and motivational) effect of student use of assessment information for learning has been found in different countries: Australia and England (Klenowski, 1995), Israel (Butler, 1987; Butler & Nisan, 1986), Venezuela (Elawar & Corno, 1985), and Canada (Ross, Hogaboam-Gray, & Rollheiser, 2002) to name just a few. The motivational effects occur because feedback helps students see the connection between their efforts and their learning, thus contributing to feelings of self-efficacy as learners. Feedback fosters students' sense of control over their own learning and helps them become more self-regulated learners (Butler & Winne, 1995; Hattie & Timperley, 2007).

Classroom Assessment Environment

It is now fairly well accepted that how teachers handle evaluations is important to the classroom environment and will help shape students' orientations towards learning (Ames & Archer, 1988; Church, Elliott, & Gable, 2001). These teacher characteristics that define what Stiggins & Conklin (1992) termed the *classroom assessment environment* are similar to what sociologists have termed aspects of *classroom structure* (Rosenholtz & Rosenholtz, 1981; Simpson, 1981). Differentiated instruction, student involvement, grouping, and grading practices create classroom structures that afford students different environments in which to "construct identities" (Rosenholtz & Rosenholtz, 1981) and draw conclusions about what it means to learn.

Initially, both educators' and sociologists' conceptions of the classroom assessment environment were based on teacher practices. More recently, interest in students' contributions to their own learning and assessment has grown (Howie, 2001; Stiggins, 2005). Studies of student self-assessment are beginning to document positive effects on achievement and motivation (e.g., Ross et al., 2002).

Standardized Testing

What is the role of standardized testing in schools? External, large-scale standardized tests play several roles in schools, depending on type of assessment. Teachers are more affected by some of these types than others. Multilevel survey batteries (broad achievement tests), psychological assessments, and other standardized tests have been given for years in the United States and elsewhere, typically at intervals and typically for program evaluation, student placement, and other school uses. Discussion of these standardized tests is beyond the scope of this article. This section will focus on the role of "examinations" and other external accountability testing of student achievement in schools, because these are the tests that have the most direct and significant effects on teachers and teaching.
Accountability Testing

The last decade of the twentieth century and the first decade of the twenty-first century has been a period of rapid change in educational accountability. The facts in this section of the chapter may have changed by the time readers see it, and space permits discussion of only a few locations. Nevertheless, some important concepts about the effects of accountability testing on teachers and schools seem to generalize.

Reports from many countries cite similar consequences for high stakes tests to those reported below for the United States (e.g., Mucheru, 2003). A concern with passing the test can replace a concern for learning. The curriculum may narrow to encompass only items perceived as needed for the test (Amrein & Berliner, 2002; Cimbricz, 2002; Min & Xiuwen, 2001). Preparation for testing may replace instruction, deskilling teachers and decontextualizing knowledge for students (Amrein & Berliner, 2002; Cimbricz, 2002). Teachers and students may feel undue pressure related to high stakes tests (McMillan, 2001). The more serious the accountability consequences, the more these conclusions apply. However, the extent of the influence of high-stakes testing on teachers and teaching depends on teachers' beliefs and resulting interpretations of the testing; therefore, testing is not the only determinant of classroom effects (Cimbricz, 2002). On the positive side, there is some evidence that high stakes assessment focuses attention on the learning standards reflected in the exam and that achievement of those standards, as tested, does rise (Cizek, 2001; Hamilton, 2003).

United States

As of the enactment of the No Child Left Behind (NCLB) law in 2002, states in the United States must report progress toward state standards in Reading and Mathematics, and by 2007 in Science as well. Hamilton (2003) reviewed studies about the effects of large-scale testing with formal stakes attached on elementary and secondary schools (K-12) in the United States. Some of these studies predated NCLB, but did reflect the growing emphasis on external testing that had been building in the United States. She found both positive and negative reported effects on instructional practice. Positive effects included more instructional time and more effective use of it; negative effects included narrowing the curriculum content to what was on the tests, and more "test-like" instructional practices, for example, extensive use of worksheets in formats similar to test items. She found negative reported effects on classroom climate, including increases in teacher stress and decreases in teacher morale, and reported increases in student stress. She found some evidence that increased use of accountability testing resulted in small gains in student achievement, but reported gains on state accountability tests were much larger than any gains measured by low-stakes measures (for example, when comparing state accountability tests to the National Assessment of Educational Progress). Because gains on high-stakes tests do not generalize to other measures of similar kinds of achievement, caution must be exerted when interpreting them (Hamilton, 2003).

Au (2007) analyzed 49 qualitative studies of the effects of high-stakes testing on curriculum in the United States. He defined curriculum as including the content (subject matter), knowledge form (integrated or fragmented), and pedagogy (teachercentered or student-centered). His study confirmed that the primary effect of highstakes testing in the United States has been to narrow the curriculum to content that is on the test (privileging reading and mathematics, for example, at the expense of social studies or the arts), to fragment knowledge into "test-related pieces" (Au, 2007, p. 258), and to increase the use of teacher-centered instructional methods. Most of the evidence for narrowing of curriculum was reported for secondary education, in particular in the language arts and social studies. However, a minority of studies included some evidence of subject matter expansion, knowledge integration, or student-centered pedagogy. For example, he found a few studies that documented curricular content expansion, as for example when learning goals about content area reading were added to social studies classes.

Europe

Europe's examination systems vary. In the four countries of the United Kingdom, educational systems and their assessment policies are becoming more different from one another, especially since 1999 constitutional changes (Daugherty & Ecclestone, 2006). Formative assessment has been incorporated into their policy discourses in different ways. In England, assessment reforms begun in 1988 intended to include an important role for teacher formative assessment, but evolved into a system of summative testing. Nevertheless, in England there remains an academic and professional interest in formative assessment. In Scotland, educational reforms went in the opposite direction, building a larger role for teacher formative tests but increasingly supporting a role for formative assessment in policy. Northern Ireland's education is mostly faith-based, with a selection exam for secondary schooling at age 11. However, by 2004, discussion of formative assessment had become part of curriculum and policy dialogue there, as well (Daugherty & Ecclestone, 2006).

In contrast, Denmark's history includes no national curriculum. Upper secondary education ends with an examination that allows students access to higher education (Egelund, 2005) but otherwise does not have a strong evaluation culture. Sweden does have a national curriculum, and National Tests are available in some subjects. However, Swedish education is decentralized, relies heavily on teachers grading, and uses a weighted grade-point average for access to higher education (Wikström, 2006).

Assessment in Romania has a recently established (1998) National Assessment and Examinations service, which is responsible for the assessment of students from Grades I to XII. It publishes exams for the end of compulsory education (National Tests at the lower secondary level) and the end of upper secondary education (the *Baccalaureate*). However, it also is experimenting with changes in the grading system teachers use and may, if the experiment successfully increases the reliability of teachers' grading and the validity of grades as indicators of achievement of national curriculum standards, even experiment with using these school-based measures instead of the National Tests to certify students for promotion (Bethell & Mihail, 2005).

Africa

Africa's examination systems also vary. Many African nations are engaged in some sort of reform. Sometimes the reason is similar to Romania's – the time is right for improvements in public education (e.g., Chilala, 2003; Howie, 2001). Sometimes the reason is expressed as a desire to do better in international comparisons (e.g., Howie, 2001). Many African nations have some common features to their developing assessment programs: national assessment councils or agencies; plans for including classroom and curriculum based assessment along with external assessments for decision making; and the realization that assessment development also requires curriculum work and attention to articulating desired educational outcomes (see Chilala, 2003, regarding assessment in Zambia; Howie, 2001, South Africa; Mucheru, 2003, Kenya; Ojerinde & Okonkwo, n.d., Nigeria). For example, South Africa has plans for incorporating both continuous formative assessment and external examinations in certification decisions, such as the Senior Certificate at grade 12 (Howie, 2001).

Asia

China has a nationally designed and administered Entrance Examination for Higher Education (EEHE) that is a gateway for access to post-secondary schooling. Students experience fierce competition, test preparation materials have proliferated, and concerns about high stakes testing in China are similar to those elsewhere (Peng, Thomas, Yang, & Li, 2006). Similar exams for 15-year-olds, Entrance Examinations for Senior High School, are designed and administered regionally or locally.

Like other countries, China is in the midst of a program of assessment research and reform. China's imperial examination system includes the oldest documented assessments, dating back 3,000 years (Min & Xiuwen, 2001). This history contributed to an emphasis on the role of examinations in education in China. The EEHE was suspended during the Cultural Revolution (1966–1976) and reinstated in 1977. China's current assessment reforms try to balance respect for the scholastic competition fostered by its examination culture with a concern for adding education for citizenship and all-around student development.

Schools in Oman issue Student Performance Reports in all grades (Oman Ministry of Education, 2005/2006). As students progress, school-developed or regional tests (depending on the subject) contribute more and more to students' marks on their Performance Reports. By grade 12, in most subjects, national exams contribute 70% and teacher's classroom assessments 30% to the performance reports. Thus there is a national examination system in Oman, but it is situated within school learning, and the exams function like final course examinations. The Ministry of Education monitors the system by sending moderation teams to visit schools.

Australia and New Zealand

In Australia's six states and two territories, assessment reforms have moved in two directions: toward more standards-referenced assessment, and toward more respect for school-based assessment and teacher judgment (Cumming & Maxwell, 2004). The former direction is consonant with assessment changes all over the world. States participate in benchmark assessment in literacy and numeracy for children in Years 3, 5, and 7, although states differ in their benchmarking methods. Some have external high-stakes examinations; for example, Queensland has statewide standards with external examinations for students in Years 11 and 12.

New Zealand has a national formative evaluation called the National Educational Monitoring Project (NEMP). NEMP tests a random sample of students in Years 4 and 8 on a 4-year rotating cycle of curricular areas. Many of the tasks are performance assessments, and the same tasks are completed by both Year 4 and Year 8 students, allowing descriptions of growth. Scores are provided for individual tasks, but only at the national level (and by gender, ethnicity, and socioeconomic status), not for individual students or schools. NEMP also assesses student motivation. Results are used to support national curricular reform and teacher instructional decisions rather than for accountability (Guskey, J. Smith, L. Smith, Crooks, & Flockton, 2006).

International Comparisons

International comparison studies administer survey assessments to students in various countries. For example, the Trends in International Mathematics and Science Study (TIMSS: 1995, 1999, 2003) assesses mathematics and science achievement of U.S. students compared to that of students in other countries. The Program for International Student Assessment (PISA: 2000, 2003) assesses 15-year-olds' capabilities in reading literacy, mathematics literacy, and science literacy. PISA also includes measures of general or cross-curricular competencies such as learning strategies. PISA is coordinated by the Organization for Economic Cooperation and Development (OECD). There are others.

The effects of international comparison studies on teachers in classrooms is indirect. National level educators and policy makers who find the results disappointing may enact initiatives that in turn, affect classrooms, curriculum and assessment, and teachers (e.g., Egelund, 2005; Howie, 2001).

Conclusions

Teachers in classrooms must live with the consequences of examinations, and interpret and use their results. Despite the apparent importance of accountability tests, however, the most important assessment and evaluation is accomplished in classroom assessment. Good classroom assessment is based on a clear understanding of what is to be learned and what constitutes good wok and success in that regard. Good classroom assessment includes feedback and opportunities for using the feedback for practice and growth. Classroom teachers use a range of assessment types: observation of students, paper and pencil tests, performance assessment, portfolios, and oral assessments.

Most teachers (in most countries) still put a lot of emphasis and time into assessment for grading, or summative assessment. A trend toward emphasizing assessment for learning, or formative assessment, has begun. This trend was perhaps most clearly articulated by the Assessment Reform Group in the U.K., and is spreading. A body of research is beginning to show that formative assessment, when done well, increases both student achievement and student motivation.

At this writing, the world of assessment and examinations remains polarized, between places that use external assessments with high stakes consequences (e.g., the U.S. or China) and those that take a more formative approach (e.g., New Zealand). Many countries are intentionally trying to balance the two. There are two reasons for trying to balance assessment uses and purposes, one positive and one negative. The positive reason is the growing body of research evidence about the good effects of formative assessment; the negative reason is the growing body of research evidence about the effects of high-stakes test on the curriculum: subject matter narrowing, knowledge fragmentation, and increased teacher-centered instruction. Political realities and the need for accountability information, however, continue to exert pressure for high-stakes testing in many countries, which in turn can have the effect of crowding out more formative assessment. The balancing act goes on.

Biographical Note

Susan M. Brookhart, PhD, is an independent educational consultant based in Helena, Montana. She is a former Professor and Chair of the Department of Educational Foundations and Leadership at Duquesne University, where she currently serves as Senior Research Associate in the Center for Advancing the Study of Teaching and Learning. She has taught both elementary and middle school. In the US, she serves on the state assessment Technical Advisory Committees for Montana and Nebraska. She is the 2007–2009 editor of *Educational Measurement: Issues and Practice*, a journal of the National Council on Measurement in Education. She is the author or co-author of six books on educational assessment. She has written or co-authored over 40 articles on classroom assessment, educational measurement, program evaluation, and professional development and serves on the editorial boards of several journals.

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CLASSROOM MANAGEMENT

Barbara Landau

Introduction

Of all the controversial subjects in the world of teaching, few strike closer to the heart and soul of educators than the topic of classroom management. Depending on who is doing the talking, classroom management can exemplify the best or the worst aspects of teaching. First of all, to understand the scope of this subject, it must be acknowledged that there are several defining elements of classroom management existing in our collective consciousness and at odds with one another. Many view the whole subject with contempt, labeling it as nothing more than a "bag of tricks." In fact, the status of classroom management as a subject is so widely looked down upon that many teacher preparation programs no longer even include it in their courses of study. Even if it is not viewed with disdain, the nature of what classroom management can and should be is commonly misunderstood. The opinion of the general public is that "Anyone can do it. You just need to get tough." And the subject is the most feared – especially by new teachers but also by those with years of experience. Managing any group of students effectively accounts for more than one sleepless night per teacher per month. For students, it can be the greatest source of stomach churning. Children fear going to school when angry, resentful, and frustrated teachers attempt to manage their classrooms. And finally, when it is done well, thoughtful management practices can be the underpinning of safe, nurturing classrooms. The caring, respectful teacher is often the most cherished memory people have of their school experiences.

In part, the controversial nature of the topic is reflected in a shared uncertainty as to what the process of creating and sustaining peaceful learning communities even should be called. There are those who call it classroom discipline, but that term carries the implication of one person controlling another, making it a less than desirable descriptor for others who are committed to constructivist practices. On the other hand, the term classroom management can include everything from rules and consequences to keeping accurate attendance and grade records. The broad scope encompassed by that term makes it similarly undesirable particularly to those who wish to focus solely on effective strategies for building and sustaining quiet, productive classrooms. Some writers attempt a compromise by referring to the topic as classroom management and discipline – an unwieldy approach that is

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typically only used for book titles. For the purposes of this chapter, the term classroom management, rather than discipline, will be used precisely because the term describes a comprehensive effort to create classrooms that function to support the best interests of teachers and students.

Some Underlying Issues

There are a number of complex and deeply personal issues associated with the term classroom management. In day-to-day living, people grow up with few if any opportunities to practice keeping a room full of other individuals focused on a task or tasks for extended periods of time, day after day. And yet, that is exactly the challenge that teachers take on when they decide to enter the education profession. They might have come to teaching originally because they love working with young children or they have a passion for a content area and want to share the wonders of science or the elegance of well-written prose with future generations. But the reality is that subject matter will never be taught and passion cannot be shared unless and until some expectations have been established – perhaps as some combination of rules; a general plan for redirecting or correcting behaviors when rules are broken; and open, effective channels of communication. And finally, teachers need to display principled and professional demeanors while orchestrating all of these elements.

There are as many strategies for managing classrooms as there are teachers. From classroom to classroom management practices are, in general, reflections of each teacher's educational philosophy, personal values, and professional preparation. The link between professional philosophies and classroom management practices is inextricably interwoven and, in the end, the two meld into one set of basic beliefs defining the perspectives teachers hold regarding their roles in the lives of students and the roles of students in the classroom.

If teachers believe that students serve as vessels waiting to be filled with content knowledge, then their approach to classroom management very likely will be authoritative and their ultimate goal will be to have quiet, obedient students who listen to lectures and perform tasks as instructed. And then there are other teachers who believe learning is a shared process of discovery. Accordingly, their approach to classroom management is characterized by egalitarian practices and their ultimate goal is to use problem solving and reflective thinking both as processes that support a well-managed classroom and processes that support effective content acquisition. The first approach is commonly referred to as behaviorist and the second as constructivist or democratic.

Understanding Behaviorist and Constructivist Management

The Basics of a Behaviorist Approach

A teacher using behaviorist practices develops rules usually without student input, presents them to students, and tells students what will happen if rules are broken and what will happen if rules are obeyed. If rules are broken, behaviorist management

strategies stipulate that there needs to be clearly stated responses. Putting student names on the board followed by an even increasing number of checkmarks – each mark designating a different and more stringent punishment – is one of the more typical forms of a behaviorist response to rule violations. Behaviorists emphasize the need for students to understand that some punishment will be exacted if students choose not to follow the rules. (Canter & Canter, 1992) The teacher predetermines the checkmarks and the punishments they represent. If rules are followed, students can expect to receive some sort of reward that might include anything from tokens such as stickers to more tangible goodies ranging from individual pieces of candy or popcorn parties for the whole class.

Acquiescence and obedience are the behaviors typically reinforced with tokens and food. The language of the rules developed by the teacher emphasizes a topdown management style. It is not unusual for behaviorists to develop classroom rules such as "Do it the first time you're told." and "Always do what the teacher says." This leaves students with one of two options. They can behave as they are expected to do and get the token goodies – all the while learning that the reason to behave is to get some reward and that developing a "What's in it for me" attitude is a good way to be successful in school. Or students can decide they do not want to obey the rules and suffer the consequences of having their names written on the board, or being placed out in a hallway for all to see, or experiencing some other form of public punishment.

Questionable Claims of Equity

Behaviorists claim that their approach to management is just as equitable as constructivism because all students are treated the same; the basic premise being that rules and consequences are applied equally to all students for any rule infraction. Behaviorists argue the worthiness of this approach because it allows teachers to spend their time teaching rather than resolving problems and mediating conflicts. In other words it is a one-size-fits-all approach that by its very design and if practiced in the proscribed fashion, ignores individual needs.

Deciding to enforce school rules through rewards and punishments is typically justified by claiming that the response is consistent, and therefore it is fair. In fact, this approach is neither consistent nor is it fair. Far too often fixed sets of responses to misbehaviors are applied inconsistently. Teachers faced with misbehaving students might decide that, based on the circumstances, the predetermined consequence is inappropriate given whatever incident has occurred and they give students a pass or they do as they are expected to do and impose the punishment regardless. The first situation results in a problem not corrected since the likelihood is that teachers who rely on punishments to control students lack alternative ideas for amending behaviors so they just ignore inappropriate actions. The other option is to impose the punishment regardless of whether or not it suits the situation. This can easily result in students feeling alienated and parents feeling angered at the injustice of an unreasonable system. Ultimately, the core issues causing the misbehaviors never get corrected and true equity suffers irreparable set backs.

Justifying the use of rewards and punishments as fair because they are applied to everyone similarly fails to stand up to scrutiny. Being fair does not mean treating all students the same. Fair treatment means students are treated in ways that best suit their individual needs. Students would not be punished for failing to understand math computations. Teachers would offer students manipulatives, counting lines, and other aids to teach the skills of correctly adding or subtracting. But students are punished for failing to follow a rule and since every student receives the same punishment, this is deemed fair treatment. As stated above, though, treating everyone the same is the opposite of being fair. Just as the students struggling to understand math would need individualized assistance, students who struggle to remember how to move safely in a classroom might need some special guidance or private reminders to walk instead of run.

The Rationale of "It Works"

Another concern about behaviorist practices is their reliance on public reprimands and the attendant embarrassment to control students. Of course, those practices are balanced with equally public rewards for doing as one is told. Such practices are justified because they are said to "work." The justification of "It works," however, never addresses the question of "It works towards what end?" Anything can work. Scolding, intimidation, and humiliation can all "work" towards quieting students, but what is the lesson ultimately being taught to students who are subjected to controls based on rewards and punishments? What is learned about self-management and personal responsibility? And when competitions are encouraged between classmates to see who has the most points earned toward goodies at the end of the day, what is learned about personal dignity and worth? When classmates are set against each other in a scramble to get the tokens and candy, what is learned about kindness, respect, and caring? Ultimately, what is learned about humanity?

The term "works" can carry an even more insidious meaning. In United States public schools and elsewhere the culture, race, class and language of students are the overwhelming determiners as to whether or not they will fit into any given classroom structure (Landau, 2004). The common rationale for rejecting constructivist management practices is "That all sounds very good, but it wouldn't work with my students" (McEwan, 1999). On closer examination, it is typically students of color, students with disabilities, students who speak a primary language other than English, and students from low-income homes to whom teachers are referring. Inevitably, imposing the same consequences on all students leads to accusations of bias when the punishments meted out tend to fall primarily on those whose gender, cultures, learning styles, special needs, race, socioeconomic status, primary language or family values differ from those of the teacher (Darling Hammond, 2004). Teachers rarely hesitate to try constructivist approaches to management with students believed to be "the good kids," those who typically come from the dominant culture and from upper middle class homes (Finn, 1999). Their race and class imbues them with an aura of privilege and inoculates them from being viewed as potential discipline problems, so teachers are willing to trust them more and give them more of a voice in the management of the classroom.

Statistics gathered in the United States on drop-out rates, suspensions and expulsions all reflect the fact that classrooms and schools are being managed in ways that are least forgiving to those students who fall outside whatever parameters have been used to define the mainstream culture (Skiba et al., 2000). Students who resist following rules and meeting expectations will likely be put out of the classroom and into some form of in-school detention. In-school detention can be anything from sitting in the school's office reception area, or in a classroom designated for that purpose, or even in a dark closet – an extreme, but not unheard of, alternative. Some in-school detention rooms even forbid students to work on assignments. LouAnne Johnson, in her article titled "Down With Detention!" said, "Capable, motivated students may decide to mind their manners a bit better after a visit to detention, but struggling students don't emerge from detention with a renewed interest in academic achievement and a burning desire to cooperate with adults. A downward spiral begins when a poor student is first assigned detention. He misses valuable instruction time and falls further behind the class" (2004). If students continue to resist, they will be put out of school for short or long periods of time. The problem with evicting problem students all together is that societies can ill-afford a population of frustrated and angry young people who feel let down and abandoned by their educational system and, as a result, forever locked into low paying, dead-end work.

Constructivist Management

The difference between behaviorist and constructivist practices are marked and dramatic. Teachers who subscribe to constructivist practices will work together with their students to develop rules based on shared values or principles, rather than presenting students with rules that already have been created. Setting out a foundation based on shared values is the necessary first step when working with students to develop classroom rules. For instance, teachers might begin by telling their students it is important for them to treat each other fairly and respectfully. Then the class works together to develop rules that reflect those principles. Another example of this constructivist approach is a model called *Judicious Discipline*, which uses the shared value of citizenship rights, and civic responsibilities as the basis for creating classroom rules (Gathercoal, 2005). Students in constructivist classrooms are not rewarded with trinkets, stickers, or food. Rather teachers rely on private compliments and verbal encouragement to reinforce appropriate decisions and self-management.

When a rule is broken, teachers using constructivist management practices are not locked into a predetermined set of consequences. Rather than having to depend upon a set of predetermined, increasingly severe consequences, constructivist responses to rule violations might include conferences, apologies, some form of restitution, or mediation. Teachers are free to use their professional skills to resolve problems peacefully, to mediate conflicts, and to strategize with troubled students about how to prevent problems from recurring.

...as more students enter the classroom feeling disempowered and confused, the decisions teachers make in selecting approaches to curriculum, instruction, and classroom management become increasingly important in teaching caring, communication skills, and democratic principles. (Jones, 1996)

Democratic or constructivist management acknowledges the difficult lives led by so many students, and teachers who adopt this approach view their commitment to students as similar to physicians taking the Hippocratic oath and swearing to first "Do no harm." On the other hand, many teachers practicing behaviorism look askance at the whole idea of constructivist management. They will voice their convictions that most students are incapable higher-level thinking and cannot be trusted to act responsibly in a classroom not governed by punishments and rewards.

Misperceptions About Constructivist Management

Some educators believe that a constructivist classroom is one that is structured around rules invented by students and might also be one in which students act as the arbiters of justice, meting out punishments as they see fit. But these are serious misperceptions, especially when constructivist management is used to support a democratically run classroom. Telling students that they will be managed democratically and then asking them to invent whatever rules they want does not serve the purposes of teaching the values inherent in a democracy. Democratic societies are built on a structure of laws that protect individual rights as well as provide for the common welfare. Allowing students to invent any rules they want, absent any underlying principles, seriously misrepresents the way free societies function. And having students serve as "judges" for classroom courts, determining a fit punishment for one of their peers negates the role of the teacher as a model for thoughtful problem solving and gentle redirection. Because students are still developing empathy, they can be far too quick to hand out harsh punishments to their peers. Allowing classroom justice to devolve into kangaroo courts does not further democracy. Teachers must be the sole arbiters of justice - and model tolerance, respect, and reason as they help students learn appropriate responses to difficult situations.

Behaviorist Versus Constructivist Language

The difference between the two approaches, behaviorism and constructivism, can most easily be identified through the language teachers use to establish rules and expectations. Teachers who emphasize the word "I" when describing how their classes will function, tend to be behaviorists. The language of management used in their classrooms emphasizes teacher control and will sound something like "I created these rules." "I like the way you are sitting right now." "I do not like what you are doing." Teachers who use the word "we" to describe their approach to management, typically are employing constructivist practices. The language they use will sound something like, "We will work together to develop our rules so that we can all feel safe and fairly treated. When there is a problem, we will work together to resolve it" (Landau, 2004).

The Voices Representing Each Perspective

Both approaches have their adherents. Currently, the majority of those writing about classroom management advocate the use of constructivist classroom management

in part because the concepts are most compatible with current trends in curriculum design, such as adapting lessons to address the Multiple Intelligences (Gardner, 1993), emphasizing small group learning activities (D. Johnson, R. Johnson, & Stanne, 2000), and authentic assessment (Higgins, 2000).

Thus a teaching philosophy that embraces pedagogical writings such as those by Freire (1972) manifests itself in the integration of constructivist management and curriculum practices. In scholarly studies these practices have proven to be successful when working with students who represent a wide range of diverse needs and interests (Freiberg, 1999; Landau & Gathercoal, 2000). The classroom atmosphere resulting from teachers who practice constructivism is one that supports the academic achievement of all students, so that the management practices and curriculum strategies implemented interweave to assure every student will be treated equitably and all individual needs will be addressed.

As effective as constructive practices have proven to be, behaviorism is still the more common practice found in classrooms everywhere. In general, this is true because behaviorist strategies can be quickly and easily implemented and they offer to teachers the promise of being instantly in charge. (Canter, L., 1992; Wong, H., & Wong, 1998) This strikes a responsive chord with many teachers, especially new teachers, who fear losing control of their students. It is not uncommon for teachers, those who are in their first year as well as those who are seasoned veterans, to reject the entire premise of constructivist management and its fundamental precepts of peaceful conflict resolution and shared problem solving, because it is based on trusting that students will make appropriate decisions if they have sufficient information, if they have opportunities to assume genuine responsibility, and if they are trusted to act as reasonable individuals.

Eclectic Management Styles

The reality, of course, is that few teachers rely solely on behaviorism or constructivist practices. Most teachers develop some personalized blend of the two. And so the reality is that management, as practiced in most classrooms, is an eclectic mix of personal beliefs, teaching philosophies and the strategies acquired from teacher preparation programs, mentor teachers, colleagues, readings, and workshops. Regardless of the approach they use, teachers everywhere agree effective management skills are essential for successful teaching and learning. Whether teachers adhere to behaviorism, constructivist strategies, or some creative mix of the two, the bottom line is that some form of management must be employed. If students are out of control, teaching cannot occur.

Beyond these elements of individual choice, the personal aspirations of those who enter the teaching profession are not insignificant influences when deciding how their classrooms will be managed. Personal visions held by teachers regarding how they want students to perceive them and interact with them may well drive many of their decisions. If they imagine that being a teacher means being best friends and confidants of their students, they will likely be reluctant to enforce a rule when it is broken or to even have any classroom rules for fear that doing so will make them less popular with students. Consequences will be imposed inconsistently, depending largely on whether or not students are willing participants in the best friend/confidant paradigm. Too many of these teachers find out the hard way that students want and appreciate structure that includes some form of professional guidance and redirection when misbehaviors do occur. While it is certainly true that students need to feel welcome, appreciated, and safe in order to experience academic success (Gathercoal, 2000; Sylwester, 2003) the narrow line between professional support and becoming a buddy or confidant can be a thin one. The more teachers step over that line, the less their classroom is likely to provide equitable support for every student. Those students who do not see teachers as friends are less likely to be supported than those who do.

Responding to Misbehavior

Corporal Punishment

Of all the controversies swirling around classroom management, the biggest and the one most likely to draw widespread attention is corporal punishment. Teachers continually wrestle with what is the best and most effective response when a student misbehaves. The answer to this question closely mirrors the societal or religious values held by teachers, parents, administrators and communities. Is a child who misbehaves inherently good, requiring only gentle guidance and redirection to become a respectful, contributing member of society? Or is the child inherently bad, requiring stern discipline and even physical punishment in order to learn and be able to follow the expectations of adult society? Should educators spare the rod only to spoil the child? Should teachers nurture the child through tender care or is corporal punishment the only way a child can learn to desist from breaking rules?

Corporal punishment has a long history. In the United States, for example, Puritans promoted the idea that children were inherently bad and needed to be civilized through stern discipline so they would fear damnation. Later, during the 1700s education shifted to mirror democratic thinking with less emphasis on corporal punishment (McEwan, 1999). And yet, corporal punishment persists to this day not only in the United States but internationally and it is controversial everywhere.

A student of Katikamu Seventh Day Adventist School was admitted to Rubaga Hospital after she was flogged by her teacher last month. The errant teacher has since been charged with causing grievous bodily harm. But caning a student into paralysis for failure to do a class assignment is symptomatic of a very old human rights issue of whether corporal punishment...is acceptable. (Susman-Stillman, 1999)

A very angry teacher, who has the sanctioned use of physical punishment, can cause physical and emotional trauma to a child. The issue comes back once again

to the influence that classroom management practices have on the way children perceive school, teachers, and the whole process of learning. Teachers who lose control and cast themselves into the role of child abusers cannot also be teachers who inspire children to achieve academic excellence.

While corporal punishment is still practiced in some countries, it has been completely banned in others. In an interesting side note, fundamentalist Christian parents sued the state educational system in Sweden. They wanted corporal punishment reinstated in their schools fearing that unless their children received physical punishment for misdeeds, the schools would be guilty of sparing rods and spoiling students. Their suit was not successful (Susman-Stillman, 1999). Today in the United States, corporal punishment has largely been outlawed. The exceptions are mostly found in the southeastern states such as Mississippi and Alabama, states not known for enlightened social attitudes.

Given all of this, can corporal punishment ever be an appropriate response for teachers when disciplining students? How severe is too severe when trying to correct a discipline problem? If a parent reprimands a child with a quick swat on the behind, it is not viewed by most of society as an inappropriate response. Teachers, on the other hand, are likely to face accusations of assault or even sexual assault for similar physical contact. In order to prevent such accusations, teachers who do employ corporal punishment resort to the use of some device such as a paddle, or cane, or ruler, etc. The use of a paddle or cane might keep the teacher from having direct physical contact with the student but the punishment meted out is more painful, dramatic, humiliating, and far more likely to leave a bruise. Many parents, who would never hit their child themselves, strenuously object to the whole idea of their child being hit by any other person, especially a teacher.

As psychologists, social workers, psychiatrists, penal workers, and others have documented, the line between physical punishment and outright abuse is all too narrow. Given all the research that indicates strong links between experiencing physical abuse in childhood and becoming a violent adult, parents and school officials alike have taken steps to remove corporal punishment from the options of corrective measures open to educators.

Alternatives to Corporal Punishments

A United Sates organization called the National Coalition to Abolish Corporal Punishment in Schools provides teachers and school administrators with suggestions for preventing misbehaviors and avoiding the need to use corporal punishment. Their suggestions include

- Establishing clear behavior expectations and guidelines.
- Focusing on student success and self-esteem.
- Seeking student input on discipline rules.
- Using a "systems approach" for prevention, intervention and resolution and developing levels of incremental consequences.
- Enforcing rules with consistency, fairness, and calmness.

- Planning lessons that provide realistic opportunities for success for all students.
- Monitoring the classroom environment continuously to prevent off-task behavior, and student disruptions, and for providing help to students who are having difficulty and supplemental tasks to students who finish work early (Center for Effective Discipline, 2006).

Restitution

Helping students correct the problem they have created or to make whole an item they have broken is another example of a constructivist response to misbehavior - one that is far more productive than corporal punishment. Restitution, however, is not about ordering students to clean up when they have made a mess. Rather it is what happens after there has been a two-way discussion between student and teacher as to what happened and what needs to be corrected. Students must have input into this process in order for it to be effective. If students mark up a desk with ink, ordering them to clean all the desks in the classroom is an example of punishment not restitution. Sitting down with students, discussing the need for desks to stay clean, and then asking students what would be the best way to fix the problem of the marked up desk are critically important components of restitution. If students offer to clean all the desks, that is fine. If students promise to clean their own desks and never do it again, that is also fine. If students offer to stand in front of the room and apologize but not clean the desks, that is not fine because it does not resolve the problem created by the students. It is up to the teacher to guide the conversation so that students understand restitution involves fixing the problem they have created. It is applicable to many situations that arise in a typical school day and provides substantial opportunities for teachers to model problem solving as a means to resolve conflicts peacefully and productively.

Class Meetings

Another avenue for productive and peaceful conflict resolution is the use of class meetings (Bafile, 2005; Landau & Gathercoal, 2000). Class meetings, in order to be effective, are based on a few basic rules. Students should always sit facing each other whether they are in their desks or seated in a circle of chairs or on the floor. All members of the class must agree to stay on topic and – most important – to never, ever use a person's name. The purpose of the class meetings is to discuss problems and to generate ideas for resolving problems, not to point an accusatory finger at a student who is having trouble understanding or following a rule. For instance, if a student engages in an angry confrontation with another student, the class does not discuss that confrontation, but rather they work together to develop ways to express anger that do not include shouting, offensive words, or fists. The teacher acts as a facilitator of the discussions but is not the person who imposes solutions. Students

discuss the problems and arrive at some ideas for helping everyone do better when faced with the same situation in the future.

If the solutions they generate are not working, the next class meeting can focus on what needs to be adjusted or changed. Proposed solutions that involve anything other than respectful, peaceful actions should be further discussed with the teacher guiding the conversation away from punitive responses and toward supportive outcomes.

Research shows that class meetings are successful ways to prevent management problems when they are held on a regular schedule rather than held once in a while when time allows (Landau & Gathercoal, 2000). Time for this process must be reserved and honored so students will appreciate its importance and value. But unscheduled class meetings can occur if there has been some sort of incident that needs to be discussed. Name calling, or a fight, an accident, or a school-wide incident that has upset students all provide good opportunities to sit down and, through this open forum, share ideas about how best to control anger, how best to express frustration, or how to handle feelings of sadness or even trauma. Class meetings are a positive preventive measure to help avoid misbehaviors and to smoothly resolve problems when they do happen.

Classroom Management as Moral Education

Understanding Moral Education's Role in Classroom Management

When considering how a teacher should respond to disruptions, a good question to ask first is "What should classroom management ultimately accomplish?" If one overarching goal of education is to help young people develop into responsible and respectful adults, then the critically important contribution of classroom management must be acknowledged. Often times, constructivist management is conflated with moral education. Although the two are not necessarily the same, they certainly serve a common purpose. A moral individual is one who is a respectful member of society and a person who is cognizant of, as well as responsive to, the needs of others.

Lawrence Kohlberg's (1979) research into the stages of moral development serves as a valuable guideline for classroom management decisions that support constructivism. The Preconventional stage of Kohlberg's Moral Development Scale describes individuals who act appropriately in order to get a reward and avoid inappropriate behavior for fear of punishment. Individuals operating at this level respond entirely to external motivators and fail to internalize appropriate behavioral decisions. This lowest level of moral development also serves as a good descriptor of behaviorist management systems based on rewards and punishments.

It logically follows then that employing behaviorism impedes the moral development of students since it serves to reinforce the lowest levels of moral development. After all, in a behaviorist classroom the only approval students receive is some form of external reward and the only disapproval will be some form of punishment imposed upon them when they do not follow rules.

Commercial Models of Moral Education

Many of the commercial moral education models available today, sometimes referred as character education models, claim to be democratic but lack a vital element to truly live up to that description. The commercial models available emphasize responsibility and the importance of obedience to rules but they omit discussions about the individual rights of students. One poster on display in a United States public school classroom and observed by this author defined a good citizen as someone who obeys the law.

What goes by the name of character education nowadays is, for the most part, a collection of exhortations and extrinsic inducements designed to make children work harder and do what they're told. Even when other values are also promoted – caring or fairness, say – the preferred method of instruction is tantamount to indoctrination. (Kohn, 1997)

Most commercial character education models do little more than put a moral education spin on behaviorism, failing to make the profound impact on student character they are hoping to achieve. In *How Children Fail*, John Holt sums up the disconnection between the goals of character education and what is ultimately taught by the commercial models this way, "Teachers and schools tend to mistake good behavior for good character. What they prize is docility, suggestibility; the child who will do what he is told...Small wonder that their efforts to build character is such a failure; they don't know it when they see it" (Holt, 1995).

Classroom Management as Democratic Education

Truly democratic models teach students to make decisions based on their citizenship rights balanced with their responsibilities or, as Kohlberg defined it, to operate at the postconventional level of moral development. In 1831 Alexis de Tocqueville, a Frenchman, traveled through the United States and described his observations in *Democracy in America, Volumes I & II*. His description of the schooling he observed reflects the movement toward moral education as a complementary component of furthering democracy. He wrote, "It cannot be doubted that in the United States, the instruction of the people powerfully contributes to the support of the democratic republic; and such much always be the case, I believe, where the instruction that enlightens the understanding is not separated from the moral education that amends the heart." De Tocqueville understood that education is about far more that basic academic skills. It is about how to use those skills to further goals of common welfare. Constructivist management plays an integral role in achieving these goals by modeling and allowing students to practice respect, responsibility, and common decency.

Models, such as *Judicious Discipline* or First Amendment Schools, provide an on-going daily immersion in the balance between individual rights and the needs

of the majority. Management models such as those cited above are working to empower students with the ability to make appropriate decisions on their own, reflecting the true spirit of Kohlberg's work and effectively addressing the question, "What should classroom management ultimately accomplish?" Teaching the skills of peaceful conflict resolution, self-advocacy, and respectful communication strategies help students strive toward and achieve the upper levels of Kohlberg's model. Put another way, young people develop a working understanding of and daily practice in what Kohlberg called the social contract through daily engagement in responsibly exercising their citizenship rights, acting in accord with civic expectations, and consistently engaging in respectful exchanges with peers and adults. A democratic or constructivist approach challenges children to develop classroom rules that are mutually supportive and to resolve their conflicts using peaceful methods such as class meetings. At the same time it encourages teachers to use a variety of responses when rules are broken in order to most effectively guide students to make better choices next time.

Conclusion

Classroom management, as can be seen in this chapter and as evidenced in every classroom around the world, is a complex, multilayered subject. As such, it cannot be passed along helter-skelter from teacher to teacher as a "bag of tricks" that lacks any philosophical base but has been thrown together because the strategies employed "work" to intimidate students into being quiet and doing their assigned tasks. The toll such an approach takes on the mental health of teachers as well as their students renders it utterly worthless and does nothing to help students become self confident, high-functioning adults. "If the purpose of discipline is to help a child behave in a way which enables him or her to be productive and to achieve in the world, then learning by example rather than fear is far more reasonable" (Green, 1988). Classroom management can be many things – but the question must always be, what is best for students, a question that goes far beyond what will work to keep students quiet for this or that time period. Management must focus on strategies that will best support the efforts of all students to become responsible, respectful adults.

Of course teachers will become frustrated and even angry when faced with repeated student misbehaviors. The ability to step back, take a breath, and respond to student behaviors in ways that demonstrate professionalism and a commitment to best pedagogical practice is a worthy skill. Similarly, responsible self-management is a learned skill that children will gain through safe exploration, emotional growth and, as with teachers, daily practice. Effective management, then, is a two-way street with teachers and students learning from each other. Ultimately the goal of classroom management must be to teach, model, practice and support each other's efforts for making decisions that further the well-being of educators, students, and society.

Biographical Note

Barbara Landau, has been an educator for over 40 years. Over that time, she has taught all grade levels from pre-school to university, and her experience includes working with students with special needs and second language learners. Dr. Landau is the author of *The Art of Classroom Management* and the editor of *Practicing Judicious Discipline* available now in its 4th edition. These and her other writings on classroom management emphasize strategies for promoting safe, respectful, and democratic school and classroom environments. In addition, she has written extensively about school law and its applications to classroom management decisions. She has served as a consultant to school districts and has conducted workshops on democratic management and education law throughout the United States. Dr. Landau can be reached at www.eduquestlearning.com.

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TEACHERS AS ROLE MODELS

Wayne Martino

Introduction

In this chapter I focus on the discourse of teachers as role models to highlight the conceptual limits of such an explanatory framework for making sense of teachers' lives and their impact on student learning in schools. I stress that the issues surrounding the call for role models in terms of recruiting more minority and male teachers in schools cannot be treated solely as a representational problem which can be addressed simply by striking the appropriate gender and ethnic balance in the teaching profession (see Latham, 1999). In fact, my argument is that the role model discourse is particularly seductive because it recycles familiar stereotypes about gender and minorities with the effect of eliding complex issues of identity management and conflict in teachers' lives (see Britzman, 1993; Button, 2007; Griffin, 1991; Martino, in press). Moreover, claims about the potential influence of teachers, on the basis of their gender and/or ethnicity, have not been substantiated in the empirical literature. By reviewing significant research in the field, I demonstrate that the familiar tendency to establish a necessary correlation between improved learning and pedagogical outcomes, as a consequence of matching teachers and students on the basis of their gender and/or ethnic backgrounds, cannot be empirically substantiated.

In this sense, my aim is to provide a more informed research based knowledge and analytic framework capable of interrogating the conceptual limits of the role model discourse, particularly as it relates to establishing the potential influence of teachers on students' lives in schools. In addition, in the second part of the chapter I draw attention to the persistence of the role model discourse as a particular gendered phenomenon within the context of the call for male teachers in elementary schools to address the educational and social needs of boys. This discussion is used as a further basis for interrogating the fallacious assumptions informing the teacher role model discourse which has been invoked in response to a moral panic surrounding the crisis of masculinity vis-à-vis the perceived threat of the increasing feminization of elementary schooling (see Lingard & Douglas, 1999; Martino, 2008). In this way, I foreground the extent to which the role model argument has been used to support the need for both a gender balanced and a more ethnically and racially diverse

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching*, 755–768. © Springer Science+Business Media LLC 2009 teaching profession, while eschewing important political issues pertaining to: (1) the devalued status of doing women's work (Williams, 1993); (2) the significance of teaching for men's sense of their own masculinity and sexuality (Francis & Skelton, 2001; Martino & Kehler, 2006) and; (3) the impact of the social dynamics of racism and sexism on minority teachers' lives (Carrington, 2002; Ehrenberg, Goldhaber, & Brewer, 1995; Pole, 1999).

The Limits of Role Model Theory

Conceptual frameworks that rely upon common sense notions of sex role modeling have been discredited in the field of teaching and teacher education (see Brtizman 1993; Carrington, 2002; Carrington and Skelton, 2003; Coulter & McNay, 1993; Gold & Reis, 1982; Pepperell & Smedley, 1998). Allan (1994), for example, claims that the calls for more male teachers as role models in schools are based largely on 'folk theories' unsupported by research. Feminist theorists such as Segal (1990) also argue that these theoretical perspectives are limited in their capacity to account for the 'complex dynamics of gender identity': 'Sex role theory fails to explain either the passion or the pain of rigid adherence to dominant gender stereotypes of some, resilient resistance to them on the part of others, or confused or contradictory combinations of the two in yet others' (p 69.). This is consistent with the critique elaborated by Britzman (1993) who also argues that driving such theories is a normative force and idealization of gender which fails to account for the contradictory and shifting nature of identity formation. She claims that discourses of role modeling invoke 'the myth of the unique self' and, hence, reinforce the notion of a stable, unitary identity that is learnt simply through a naive process of imitation.

In fact, Britzman emphasizes that multicultural approaches to understanding gender would benefit significantly from an examination of the contradictory desires that students bring to the classroom rather than resorting to an emphasis on role modeling as a means by which to address the practices of inequality and stigma that are a consequence of systemic racism. In short, providing more visible minority role models in schools is not enough! What is also needed, Britzman argues, are pedagogical imperatives and interventions which provide opportunities for students in schools to explore 'desires as contradictory and in relation to culture, social structure, history, and one another, and in relation to their own proximity to the histories and experiences of racism and sexism' (p. 39). This needs to be understood as part of an overall commitment to examining 'one's own investments in maintaining stereotypic appearances and naturalizing heterosexuality', which are at the core of debates about teachers as role models where the normative force of gender is very much at play (p. 40) (see Martino, in press-a; Martino & Kehler, 2006; Mills, Martino & Lingard, 2004). Thus, what is highlighted is the extent to which discourses about teachers as idealized role models fail to address the damaging effects of reducing the formation of gender identity to the category of sex-role stereotyping (Brtizman, 1993, p. 26). Furthermore, such discourses result in an erasure and denial of any consideration of the complex dynamics of racism, sexism, heterosexism, homophobia and ethnocentrism and how these impact on teachers' identities, practices and pedagogical relations with students. As Brtizman argues: 'Our understanding of gender, then needs to move beyond singularity, taking into account the reality that each of us embodies a wide range of categorical commitments such as race, sexuality, generation, class, and so on: the shifting meanings of these social markers arrange the experience of gender' (p. 26).

In this sense, what is needed is some interrogation of the conceptual limits that currently frame discourses about teachers as role models. A more sophisticated framework is required which helps one to make sense of how teachers' identity formation and management strategies as educators 'are contingent upon the conflictive meanings of race, gender, sexuality, generation, ethnicity ...' (Britzman, 1993, p. 27; see also Griffin, 1991; King, 2004; Pole, 1999). At the heart of such a polemic for policy makers and those concerned about lack of representation of male and visible minority teachers in schools is a fundamental idealization of gender as a form of sexrole socialization that fails to engage with the politics of difference. In short, such conceptual frameworks ignore the reality that educators' lives are not only marked by gender. In fact, shifting meanings of other social determinants such as sexuality, race and class, for example, mediate in significant ways one's experience of gender (see hooks 2004; King, 1998; Lam, 1996; Martino, 2008; Martino & Frank, 2006; Roulston & Mills, 2000; Sargent, 2005; Thiessen et al., 1996). Thus simply addressing the problem of the lack of male elementary school teachers as role models in terms of advocating the need for a more gender balanced teaching profession fails to address the denigration of doing women's work and the significance of hegemonic masculinity vis-à-vis the privileging and positioning of male teacher teachers in schools (Francis & Skelton, 2001; Skelton, 2002, 2003; Williams, 1993).

For example, Button's (2007) research found that, despite male teachers' so called minority status in terms of their representation in elementary schools in Toronto, they were more valued than women teachers. This was related to the structure of patriarchy and its institutionalization which was manifested in terms of: (i) male career advantage; (ii) the privileging of male authority and the perception of female teachers as inferior in relation to students, parents and professional confidence; (iii) the preference for the 'esteemed male teacher' (p. 100). Not only did parents consider male teachers to be better disciplinarians, they were also perceived to be more competent and influential than women teachers. While men teachers achieved a father-like status in schools, students and parents tended to have less respect for female teachers. Female participants in Button's study recounted instances of where they felt intimidated by students and pressured by parents with their professional status and competency being brought into question in ways that contrasted starkly with male teachers' experiences and accounts of their professional lives in schools. Male teachers, in fact, documented 'feeling exceptional' and valued in ways that were denied to many of their female counterparts who felt that administrators were more lenient with male teachers and tended to overlook inadequate work when performed by the latter. In addition, many of the male teacher participants in Button's study also mentioned how easy it was for them to be accepted into the pre-service program, given the feminization of the profession and, hence, the lack of and demand for more male elementary

school teachers. They also perceived themselves to be advantaged in terms of getting a job, believing that principals preferred to hire male teachers given their declining representation in elementary schools. The point is that such research tends to foreground the limits of the idealization of the role model discourse in that it disguises or denies the reality of male privilege and power in relation to doing women's work (Williams, 1993).

In terms of race within the context of boys' education, there is also a problem with how the discourse of teachers as role models gets co-opted, with complex issues of systemic racism, class and masculinity simply being elided in any discussion about the need for more male teachers in schools (see Davis, 2006; Kunjufu, 2005). For example, race often gets reduced to a question simply of representation, with concern about male teacher shortage being fuelled by a moral panic about absent fathers in young black men's lives. In fact, rarely do questions about whiteness get addressed with a generalized discourse about role models functioning as the panacea for addressing the problem of a masculinity crisis for all boys in schools (see Ligard, Martino & Mills, forthcoming). Moreover, the preoccupation appears to be centered (often implicitly) on the need for heterosexual male teachers to function as role models - read as surrogate fathers - given the concern about the absence of fathers in boys' lives (see Hoff Sommers, 2000). In addition, there is a decided failure to address the role that homophobia plays in the policing of masculinities and how this relates to a denigration of the feminine, in terms of both a devaluation of women's work and of capacities, such as nurturing and caring, which are deemed to be feminine attributes (see King, 1998; Martino, 2008; Mills et al., 2004).

Racial issues, within the context of male teacher debates, moreover, are often erased and when they are addressed, issues about absence fathers tend to get linked to gang-related violence and the associative criminalization of young Black men (Editorial, 2007). However, the result for the most part, is still a failure to address the systemic effects and impact of racism, economic disadvantage and homophobia as they relate to questions of masculinity in these boys' lives. In short, for the most part, there is a decided failure in the policy-related field to engage with the issue of the feminization of the teaching profession outside of an analytic and explanatory framework that relies on sex-role socialization (see Martino, 2008). Thus the policing of masculinity, as a core issue related to 'getting gender right' and how this identity management practice is linked to compulsory heterosexuality and systemic forms of racism rarely, if ever, gets addressed by educational policy makers who appear to be more concerned with a project of re-masculinization, as a basis for affirmative action, in an attempt to re-dress a gender imbalance in the teaching profession (see Mills et al., 2007, 2004; Drudy, Martin, & Woods, 2005).

What is needed, as I have attempted to demonstrate in this section, are analytic and conceptual frameworks capable of addressing gender as *a site of identity struggle*. This involves an examination of contradictory forces of normalization at play in terms of the interplay of homophobia, sexism, racism, misogyny and heterosexism in teachers' lives, as a basis for moving beyond the limits of the role model discourse, with its idealized construct of gender as a stable identity category. As will be further demonstrated in the following section, such discourses simply fail to address the complex dynamics and politics of doing *women's work* and, moreover, are unable to address the significance of hegemonic heterosexual masculinity in terms of both its impact on male teachers' identity struggles and issues related to male teacher recruitment (see Drudy et al., 2005; Foster & Newman, 2005; Francis & Skelton, 2001; Carrington, 2002; Carrington & Skelton, 2003; Pepperell & Smedley, 1998; Skelton, 2002).

The Burden of Being a Role Model

Much of the empirical work in the field supports Britzman's concerns about the conceptual limits of role modeling in its attempt to account for the complexities involved in teachers' identity-management work and how this relates to their pedagogical relations with students and practices in schools. Carrington's (2002) research is important in this regard. He interrogates the assumptions underscoring the Teacher Training Agency's teacher recruitment policies in England and Wales which stress the importance of role models for minority children. These relate specifically to the position that the academic performance of African Caribbean and Bangladeshi children in UK schools can be improved by training and employing more ethnic minority teachers as role models. This can be achieved, it is thought, by such teachers challenging the low expectations and cultural stereotypes associated with minority students. This position, Carrington claims, is not dissimilar to the widespread view that simply providing more male role models in schools will address the gender achievement gap and male disaffection with schooling (p 41). The Ontario College of Teachers (2004) in a report documenting concern about male teacher shortage, for example, has also suggested that there might be 'a correlation between the achievement of boys and the presence of male teachers in Ontario classrooms' (p. 4). In fact, the Education Minister of Ontario at the time is quoted in the report as supporting such a position. However, as Carrington points out, empirical work in the field fails to support this view. Both Lahelma (2000) and Lingard, Martino, Mills, and Bahr (2002) in their research with students in Finnish and Australian schools respectively found that the gender of the teacher was deemed to be irrelevant in determining the quality of the learning experience. Rather, the students identified certain teacher traits and attributes as contributing significantly to enhancing their learning. These included the capacity to create a safe learning environment through maintaining discipline in a friendly, sensitive manner; establishing warm and caring relationships with students; providing an intellectually stimulating curriculum and making it relevant to the everyday lives of students. These capacities were not considered to be determined or influenced in any way by the teacher's gender.

Other scholars also illustrate that matching teachers and students by gender and ethnicity does not necessarily lead to enhanced academic achievement or to the quality of the learning experience for minority students. Ehrenberg et al. (1995), for example, set out to determine whether teachers' race, gender and ethnicity matter in terms of addressing poor academic performance and high drop out rates for many minority students vis-à-vis their white counterparts. In addition, they were concerned to provide empirical evidence regarding the belief that the presence of minority teachers, particularly those from under-represented groups, translates into improving the academic achievement of minority students. For instance, they claim that: 'Most of the research has not addressed the students' educational outcomes; has failed to control for other teacher characteristics, such as verbal ability, experience, and degree levels; and has not investigated the effects that under-represented minority teachers have on non-minority students' (p 548). In this sense, they distinguish between attitudinal measures and educational outcomes in terms of assessing the impact of teachers as role models. These researchers found that for white students in the sample, the gender of the teacher did not correlate in any significant way with their educational performance. In addition, they conclude that the teacher's race and ethnicity also did not affect how much students learned. However, they did find that teachers' subjective evaluations did impact on students' attitudes to school and that there was a teacher-student match or correlation along gender, race and ethnicity lines in this regard. This is consistent with other research in North America which found that while minority teachers tended to rate minority students more highly, this did not necessarily translate into better academic achievement for the latter (see Quiocho & Rios, 2000, p. 510). This suggests that potential exists for such teachers to empathize with minority students and to make a significant difference in their lives (see Carrington, 2002). As Quiocho and Rios (2000) argue, minority teachers 'are more likely to bring a critical, social justice orientation and consciousness that stems from their real, lived experiences of inequality' (p. 522).

Other significant research, however, indicates that such attitudinal correlates related to a teacher's ethnicity and/or gender in terms of their capacity as role models to influence students are at most tenuous and ambiguous. Allen (2000), for example, argues that while 'all teachers are ethical templates' in the sense of being a role model, this does not necessarily mean that simply being a minority group member will translate into higher expectations being set for minority students. In this sense, Allen is skeptical of the role model argument and the logic it supports regarding the 'premise that minorities are recruited solely on their capacity to perform as role models and not because they are capable'. This is the same sort of logic which informs the call for more male teacher teachers as role models for boys in elementary schools, with important questions about what sort of male role models are needed simply being elided in the policy related and public discourse about such concerns. In fact, researchers such as Ashley (2003) raise serious questions about the potential of male teachers as role models to perpetuate some of the less desirable facets of hegemonic masculinity (p. 261) (see also Francis & Skelton, 2001). This applies equally to male minority teachers who, as Britzman (1993) indicates may also have deep emotional investments in maintaining the imperatives of hegemonic heterosexual masculinity (p. 37). These issues will be taken up further in the next section of the chapter.

Pole's (1999) research involving an investigation of minority teachers' lives and careers in the UK tends to support Allen's claims about the need to reject a necessary correlation between being a minority teacher and a positive role model for minority students. In fact, his study confirms that the presence of minority teachers does not

necessarily translate into influencing minority students in terms of embracing a positive view of elementary school teaching and, hence, a desire to embrace teaching as a career. On the basis of his interviews with black teachers he concludes that:

Role models were not race specific in all cases. What seemed most important was exposure to a person of influence who showed an interest in the individual and made them realize that teaching was a possibility for them. (p. 318)

Such research does not support Latham's (1999) position, which tends to frame the call for more minority teachers in US schools as a response to a representational problem that is related to concerns about the 'disparity between demographic profiles of teachers and students'. In this sense, Latham believes that Ehrenberg et al.'s (1995) research does not detract from the need to establish a more diverse teaching force. However, he still resorts to asserting that 'the mismatch between racial and ethnic profiles of teachers and students reduces the likelihood that teachers will connect learning to all their students in a meaningful way'. Hence, the problem is not so much the argument for a more diverse teaching profession, which is representative of the student population in terms of both ethnicity and gender, but the assertion that there is a necessary correlation between improved learning and pedagogical outcomes, as a result of matching teachers and students according to their gender and or racial/ethnic backgrounds.

Pole (1999), for example, illustrates the problematic nature of this role model argument. For instance, while race was a factor acknowledged by his participants as a key motive for choosing to become a teacher (i.e. the desire to be a positive role model), minority students did not respond accordingly on the basis of the teacher's minority background. In fact, one black teacher recounted how she had difficulty establishing herself as a teacher and gaining respect from black students (p. 323). She was regarded as a 'coconut' – black on the outside but white on the inside – in that she was perceived to be identifying in her role as teacher with the standards and norms of the white community. A female Muslim teacher also talked about the difficulties she encountered in gaining respect from a group of Sikh teenage boys who openly refused to accept her authority.

Being a minority teacher also brought with it increased responsibilities. One South Asian teacher in Pole's study talked about the burden that her minority status carried in terms of the sort of requests that were made of her in terms of liaising with the parent community on the school's behalf. This involved ensuring that minority parents received translations of school documentation, as well as just making them feel more welcome in the school. She undertook such duties without any formal recognition from the administration. In addition all the black teachers in Pole's study mentioned that they had experienced some form of racism, often in the form of racist jokes or name calling told at their expense (p. 323).

Lam (1996) also concurs with the studies undertaken by Pole (1999), Ehrenberg et al. (1995) and Allen (2000) when she states that 'putting in a teacher who has the same background (be it race, colour or ethnicity) as students does not necessarily mean the students will be well-served' (p. 15). She highlights, as does Britzman, that

complex questions of identity and how these connect to teaching need to be taken into consideration (see Martino, in press). Like the teachers' in Pole's study she identifies unintentional racism as impacting on Rose, a visible minority teacher. The racism was often related to having to deal with stereotypical perceptions that 'Chinese people do not speak English well' (p. 23). Rose was also consistently called on by the school principal to act as an interpreter, despite the fact that she could not speak or understand Vietnamese! Lam provides many examples of negative treatment and stereotyping related to visible difference that Rose had to endure. While experiencing such racism may have enabled Rose to empathize with minority students on the basis that they too are likely to have had similar experiences, Lam is careful not to espouse such a position. For example, she mentions that Rose has had boys from Muslim countries giving her 'a hard time' because she is both female and Chinese (p. 40). This again highlights the limits of the role model discourse and the extent to which it idealizes sex-role and ethnic stereotyping thereby eliding the effect of systemic forms of discrimination and oppression such as sexism and homophobia in their capacity to cut across class, ethnic and racial divides (see Kumashiro, 2001). Interestingly, Rose is emphatic in her assertion that being Chinese does not make her the kind of teacher that she is! Lam claims that Rose's adamant rejection of a role-identity connection is based on both 'her negative experiences with the burden of being different' and her view that a professional is one who can fulfill the role of teacher without letting her own identity get in the way (p. 41).

The studies reviewed in this section have highlighted and problematized the burden of being a role model with the expectation it carries for individual teachers, on the basis of their gender and/or minority status, to transform the educational experiences of disempowered students. They draw attention to the idealization of teachers as role models and the limits that such a discourse imposes in its the failure to give due consideration to the pedagogical requirements and resources needed to address the systemic and structural influences of racism and economic disadvantage experienced by minority groups. In other words, the requirement to be a role model places the responsibility for transformation on the individual teacher rather than on the system which produces the structural inequality in the first place.

Issues of Masculinity and Role-modeling

Invoking a necessary correlation between being a male teacher and improved educational outcomes for boys has also plagued the boys' education debates in ways that parallel the use of the role model argument to support a more ethnically and racially diverse teaching force (see Martino & Berrill, 2003). What is elided in the calls for more male role models in schools is any discussion about the sort of male teacher that is required to support boys in their learning. Moreover, there is a common sense notion that any man will do, particularly in elementary schools where there is a perceived need for more men to counteract the supposed toxic influences of the increasing feminization of the teaching force on boys' developing masculinity (Ashley, 2003). Thus, there has been a decided failure in the policy related field and public media domain to raise important questions about the expectations and assumptions surrounding the requirement for male teachers to serve as particular sorts of exemplars of a culturally validated masculinity that may not necessarily be in the best interest of boys (see Francis & Skelton, 2001; Lingard, 2003; Martino & Pallotta-Chiarolli, 2003). In this sense, within the context of debates about boys' education, the role model discourse has been hijacked by a recuperative masculinity politics in response to concerns about the sissification of boys (see Rowan, Knobel, Bigum, & Lankshear, 2002). Thus certain sorts of male role models are called for in response to a masculinity crisis that is linked to the phenomenon of the absent father and its impact on boys' lives.

However, accompanying this implicit call for male teachers to act as surrogate fathers is a failure to address the complex dynamics of hegemonic masculinity within the context of doing women's work (Williams, 1993). In other words, there is lack of policy related discussion about the constraints imposed by prevailing images of teaching as women's work and the restrictions that dominant perceptions of masculinity create for male teachers (see Martino, in press). For example, within the context of a media generated debate about boys' education and problem boys, the call for more male teachers as role models has intensified with the effect of narrowly defining the limits of the policy related discussion in terms of a masculinity crisis vis-à-vis the lack of a gender balance in the elementary teaching profession (see Lingard, 2003; Martino & Kehler, 2006; Mills et al., 2007).

This emergent discourse has been linked to a particular backlash politics which has fueled a moral panic about a 'masculinity crisis' afflicting boys in schools and men in the broader society as a result of the impact of feminism (see Faludi, 1991; Lingard & Douglas, 1999; Mills et al., 2007). For instance, Christina Hoff Sommers (2000) argues that a prevailing view in American education over the past decade is that 'boys are resented, both as the unfairly privileged sex and as obstacles on the path to gender justice for girls'. This has resulted, she claims in a project of feminization of boys in schools with concerted support being offered for programs that are committed to 'civiliz[ing] boys by diminishing their masculinity'. Moreover, Hoff-Sommers asserts that boys do not need to be 'rescued from their masculinity'. Rather, she claims, it is the physical separation from their fathers that is considered to be at the heart of the problem for those boys who are most at risk for juvenile delinguency and violence. Thus the discourse of the absent father is often invoked to account for the boy problem in schools and the wider society, with the call for more male teachers as role models being identified in the policy and media generated debates as a solution to addressing or ameliorating this masculinity crisis (see House of Representatives Standing Committee, 2002; Mills et al., 2004, 2007; Ontario College of Teachers, 2004). This has surfaced recently as a racialized phenomenon in the public media in Canada where gun and gang-related violence in the notorious Jane-Finch region of Toronto continues to be linked to young black men growing up fatherless and economically disadvantaged (Editorial, 2007).

This context of moral concern and panic about absent fathers and single-parent families is important in developing a deeper understanding about the gender politics surrounding the discourse of teachers as role models, particularly as it relates specifically to the call for more male teachers to address boys' educational and psycho-social needs in schools. The framing of such concerns represents another exemplary instance of the conceptual limits of the role model discourse in its capacity to account for the complexity of identity issues and their impact on teachers' lives and experiences in schools. This is supported by the research undertaken by Allan (1994) in his investigation of the meanings of role modeling for male elementary school teachers. He investigates some of the ways in which men teachers negotiate the contradictions of role-modeling, which involve tensions related to feeling compelled to demonstrate that they are *real* men, while simultaneously embracing 'what others perceive as stereotypical aptitudes for the sensitive, caring relationships necessary to teach children' (p. 3). Sargent (2005) also found men teachers caught between two diametrically opposed and contradictory identity positions which involved 'doing a subordinate form of masculinity that would make them successful teachers and structural demands for them to do a form of complicit masculinity that is more supportive of the patriarchal gender regime' (p. 253). Both researchers in this regard highlight the conceptual and explanatory limits of sex-role theory in its capacity to account for such contradictory identity management relations. Allan (1994), in fact claims that 'sex role theory cannot be empirically confirmed' and that 'it is ahistorical, incapable of explaining cultural differences, and blind to gender as expressing power relationships' (p. 4). Despite its limitations, however, he asserts that sex-role modeling is still a widely accepted and unexamined concept 'which underlies the public justification of a need for men teaching in elementary school' (p. 5) (see also Ashley, 2003).

Many of the male teachers in Allan's study perceived the need for male role modeling in schools to be tied to the breakdown of family and to the increasing absence of fathers in many children's home lives. They also indicated that they felt they were being hired as 'surrogate fathers' with the expectation that they would be able to provide discipline as a complement to the 'parenting efforts of single female parents' (p. 7). However, such a requirement led many of the male teachers to feel uncertain or uneasy about 'surrogate fathering' and what role-modeling was meant to entail. For example, what did it mean to model being a man while being employed to undertake work that is typically performed by women? This question led the men teachers, Allan indicates, to embracing a conscious hypermasculinity as a homophobic defense against warding off any association of effeminacy or homosexuality (see Martino & Frank, 2006). This gender dynamic, he further adds, is directly tied to 'men's fear of being thought unmasculine', which he understands as 'a component of their construction of masculinity' (p. 9; see also Connell, 1995). Allan also shows that overlaying this fear of being perceived as unmasculine by engaging in a form of caring work considered to be *natural* for women, was the concern of being positioned as a potential pedophile (see Martino & Berrill, 2007). This involved another contradictory dynamic of feeling compelled to demonstrate nurturing capacities and emotional literacy in their relations with children, while simultaneously having to deal with the realities of being perceived as potential pedophiles for demonstrating qualities considered to be off-limits to or unnatural for men (p. 12).

In fact, King's research (1998, 2004) confirms Allen's findings and support his conclusions about the impact and effect of the perception of elementary school teaching

as a caring, nurturing and, hence feminized practice (see also Noddings, 1992; Williams, 1993). It is precisely this construction of teaching as a 'gender-inscribed social behaviour' and, hence, as an uncommon form of caring for men, which produces anxieties for male teachers, whose masculinities often get placed under a particular kind of normalizing surveillance (King, 1998, p. 5). This, King (1998) points out, may also explain why some men choose not to enter the teaching profession (see also Drudy et al., 2005). This practice, of male teachers adopting a culturally validated hegemonic form of masculinity to assert their normalcy, is also read by King as an attempt to ward off any association of deviancy surrounding the 'unnamed, silent accusation of pedophilia' (p 6). Thus, this association of effeminacy with gay sexuality functions as a homophobic strategy to position all gay men as potential sexual deviants and emerges as a significant influence in male primary school teachers' lives in King's research. However, the sex-role modeling discourse fails to inadequately address such as a dynamic, in its denial or rather failure to address the significance of homophobia and its role in the policing, validation and institutionalization of hegemonic masculinities.

This is further highlighted by Skelton's (2001) research which also points to the very significant ways in which male primary teachers feel compelled to present themselves as 'properly masculine' (see also Francis & Skelton, 2001; Roulston & Mills, 2000). Since schools are perceived to be female environments, this may involve, she argues, male teachers 'exaggerating various aspects of masculinity and thus presenting themselves as 'laddish' through using humour and demonstrating a passion for football' (138). Skelton (2003) provides additional evidence to support these claims about male teachers. She found that 'male student teachers of upper primary children were more likely to be concerned about and supportive of traditional images of masculinity than those men who were training to teach lower primary grades'. This study was undertaken within the context of highly charged and politicized context in the UK with the government's drive to recruit more male teachers in primary schools to combat the 'laddish' behaviour of boys. This strategy, Skelton stresses, is based on limited sex role socialization theories 'whereby masculinity and femininity are located solely within male and female bodies'.

Conclusion

In this chapter I have argued that dominant discourses about teachers as role models have been governed by conceptual limits that fail to address taken-for-granted claims that the gender and ethnicity/race of the teacher actually makes a difference in terms of student learning and engagement with schooling. What has been highlighted through engaging with the literature in the field is that the issue of minority and male teachers as a representational problem, while valid, tends to be grounded in unsubstantiated claims about teacher effects on student learning and engagement as determined by a teacher-student-match in terms of racial, gender and ethnic profiles. In this sense, the chapter has elucidated the need for policy-makers to avoid establishing a correlation between a teachers' identity status along gender, race or ethnic lines and improved student learning and engagement in schools, particularly given that such causal links cannot be adequately substantiated. In other words, it is extremely important to separate out issues pertaining to striking a more genderbalanced and diversified teaching profession from assertions about the necessary correlation between improved learning and engagement with schooling for boys and minority students as a consequence of a teacher-student match according to gender and or racial/ethnic profiles.

The other lesson to be learned from this investigation into the significance of teachers as role models is the need to acknowledge the forces of normalization at play when common-sense understandings about sex-role socialization are mobilized to assert certain truths about teacher effects on student learning and engagement with schooling. As I have attempted to demonstrate in this chapter, discourses about teachers as role models are often motivated by an investment in an idealization of stereotypical conceptions of teacher identity along gender and race lines and, in this sense, fail to address 'important differences within the categories of masculinity and femininity' (Britzman, 1993, p. 34). Policy makers and those concerned about representational issues in the teaching profession would do well to pay attention to the research-based literature that calls for a need to move beyond a simplistic discourse of teachers as role models. In light of the literature reviewed in this chapter, this would entail embracing a more sophisticated explanatory framework that attends to the systemic influences of racism, sexism, homophobia, heterosexism and ethnocentricism in terms of their capacity to mediate teacher-student relations and pedagogical effects on learning outcomes and student engagement with schooling.

Biographical Note

Wayne Martino is an Associate professor in the Faculty of Education at the University of Western Ontario, Canada. His research and teaching interests relate to addressing masculinity and schooling, anti-homophobic education and equity and social justice issues as they pertain to minority teachers and students. His books include *So What's a Boy?* (Open University Press, 2003, with Maria Pallotta-Chiarolli) and *Gendered Outcasts and Sexual Outlaws* (Haworth Press, 2006, with Chris Kendall). His latest book is entitled *Boys and Schooling: Beyond Structural Reform* (Palgrave, with Bob Lingard and Martin Mills).

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TEACHING IN A MULTICULTURAL CLASSROOM

Kerri Ullucci

The Multicultural Classroom: A Look at Demography

Schools across the US continue to diversify, making multicultural classrooms more of the norm than the exception. Children of color comprised 43% of the public school enrollment in 2004 (National Center for Education Statistics, 2006a). By 2020, it is estimated that students of color will make up half the student population (Weisman & Garza, 2002). The number of English language learners also continues to grow, representing 19% of public school students in 2004. This gain reflects a 162% increase in students who speak languages other than English at home over the last 25 years (National Center for Education Statistics, 2006a). While widely believed to be an issue confined to urban schools, changing demographics impact schooling across the US. In 2004, students of color made up 23.6% of the public K-12 enrollment in Kansas; in 2005, 23% of students in Minneapolis public schools were English language learners (National Center for Education Statistics, 2004–2005, 2006b). While the US will serve as the focus for this chapter, immigration continues to impact schools around the world. Canada enrolls 40,000 new immigrant students in its public schools each year; 80% do not speak English (Strum & Biette, 2005). European schools also serve students from a variety of language, cultural and religious backgrounds. For example, ~5 million Muslims live in France (Judge, 2004). Issues around culture, identity, and patriotism recently came to a boiling point regarding the wearing of head scarves by Muslim girls in French schools. French law consequently banned pupils in public schools from wearing any conspicuous sign of religious affiliation (Judge, 2004). This example illuminates the "realness" of cultural clashes in school. Regardless of place, teachers find themselves charged with educating children from diverse backgrounds. How can teachers be responsive to this need?

Examples of "multicultural" education abound:

• A third-grade teacher celebrates Cinco de Mayo in her class of mostly Caucasian students. They listen to songs in Spanish and eat tamales. The students make paper sombreros to wear during the festivities.

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- A first-grade teacher includes baby dolls of many races in his dramatic play area. He has multicolored paper and paint in the art corner to represent a variety of skin tones. On the wall are basic words in Spanish, English and Vietnamese, the primary languages of his students.
- In a sixth-grade suburban classroom, students read a story about Martin Luther King and complete a multiple choice quiz on their reading. They are preparing for standardized tests. The test prep materials include pictures of children in grass skirts, a child wearing a fez, and a girl in traditional African clothes, intended to show diversity.
- Students work in collaborative groups on math projects. They are designing buildings which will benefit their urban community: a fire station, a community center and a church. They practice sophisticated geometry skills and work with a parent volunteer on how to read a blueprint. They send letters to their local representatives, offering alternatives to the demolition of a former factory building, which they would like to be redeveloped into a neighborhood school.

Do these lessons adequately represent multicultural education? What does it look like to teach multiculturally in the classroom? The field of Education continues to grapple with what multiculturalism entails. To better understand the term, it is first necessary to deconstruct multicultural. While the term multi easily implies many, cultural provides a special challenge. Culture is used in daily conversation to represent the more tangible manifestations of our lives: food, art, clothes, music. In classrooms, multiculturalism tends to begin and end at this level: teachers may explore diverse music, celebrate various holidays or incorporate examples of multicultural art in lessons. While these are important components of building a multicultural community, culture can be understood in a much more expansive way. McLaren (2003) defines culture as "a set of practices, ideologies and values from which different groups draw to make sense of the world" (p. 74). Looking through this lens, culture includes much more than concrete representations of a group's identity. Thus when we talk about multicultural education, two key concepts are pertinent: (1) culture is made of many components, both tangible and invisible; it is "the sum total of ways of living" (Irvine, 1995, as cited in Irvine and Armento, 2001, p. 6). These components include communication styles, use of stories, ceremonies, power dynamics, childrearing practices, religion, language, rituals, gender roles, use of time, and deference to elders; (2) cultural norms and expectations differ group to group, thus to be *multicultural* means to include a myriad of perspectives on culture (including those of people of color, English language learners, Caucasians, of all classes, ability levels and orientations).

A commitment to honoring multiple world views and to exploring different paths that lead to rigorous academic achievement is at the core of multicultural education. Rather than conceive of multicultural education narrowly as something teachers "do" or "add" to their curriculum, this chapter will help provide a multilayered view of multicultural education as a comprehensive approach to students, pedagogy and learning. The chapter will open with a discussion of tensions in the field over what multicultural education means. I will then turn to key principles that help form the foundation of multicultural education. Rather than provide a laundry list of what teachers can do, I will focus more on dispositions, attitudes and approaches that can undergird powerful instruction for children of color and English language learners.

The Multiple Meanings of Multicultural Education

In the field of Education, little consensus exists as to what multicultural education includes. Multicultural education is frequently used as a catch-all for a variety of interventions. Burnett (1994) posits that "multicultural education" can be applied to three types of programs: (1) in content-oriented programs, which add multicultural content to the curriculum, celebrate "ethnic" holidays, or include multicultural authors in the classroom. The goal is towards exposure of students to different ethnic groups and their cultures; (2) in student-orientated programs, which address the academic needs of individual racial and/or language groups. In these programs, children of color are provided with supports to better access mainstream schooling. These are often seen as compensatory by design, and (3) in socially-oriented programs, which serve to decrease bias and increase racial tolerance. These programs tend to be reform-minded in nature.

In a similar approach, Banks (1997) also argues that multicultural education can be understood in at least three ways:

- 1. As an idea, that regardless of background, ability, or gender, all children should have access to equitable schooling experiences.
- 2. As a reform movement, requiring considerable transformation in schools so that children can experience equal chances for success.
- 3. As a process, in which students gather the "knowledge, attitudes and skills needed to function within their own microcultures ... and within the global community" (p. 26).

As mentioned previously, multicultural education is often misperceived as simply the addition of curriculum materials which include a variety of racial and ethnic groups. This is but one piece of the total picture. Banks (1997) cautions against the notion that multicultural education is simply a curriculum issue. Instead, he argues that multicultural education incorporates content, pedagogy, dispositions and access. In helping educators to think of multicultural education can occur along five dimensions. These dimensions include content integration, knowledge construction, prejudice reduction, equity pedagogy and an empowering school culture.

In *content integration*, Banks highlights the importance of ethnic and cultural content in the curriculum. Teachers can integrate multicultural content by including books and materials that represent many cultures and by using examples that incorporate diverse experiences. With *knowledge construction*, Banks focuses on the ways in which "implicit cultural assumptions, frames of reference, perspectives and biases within a discipline influence the ways in which knowledge is constructed within it" (1997, p. 21). Teachers work to uncover hidden bias in disciplines through critical analysis of content within a field of study, and by unmasking how our understanding of the field may be shaded by antiquated beliefs. For example, students can talk about the global language of math, and how many cultures around the world have devised systems for working with numbers. They can go on to discuss how many of these number systems have been marginalized over time and the implications of this

omission. *Prejudice reduction* describes activities which seek to eliminate prejudice in schools and develop pro-social behaviors. Teachers can help students expose bias in the classroom and work on strategies to increase intergroup respect and friendship. Through an *equity pedagogy*, teachers can alter their instruction to meet the needs of diverse students. Teachers take into account the different learning and socializing styles of their students and adjust their teaching accordingly. Finally, an *empowering school culture* raises the importance of just school systems while highlighting discriminatory sorting mechanisms in schools, such as tracking. Through an empowering school culture, all students have access to rigorous learning, without structural barriers to their success. Taken together, these components help make multicultural reform a multifaceted, school-wide endeavor.

Culturally Responsive Teaching: A Critical Approach to Multicultural Education

The above frameworks show the many ways multicultural education can be understood. It is clear that an immense range of goals fit under the "multicultural education" label. The classroom approaches can vary immensely, from encouraging tolerance and friendship between students to critiquing racist practices in their local governments. The remainder of this chapter will focus on multicultural education as a daily, active orientation that while including more technical aspects of multiculturalism, focuses largely on a more critical stance. At its heart, multicultural education is about preparing all students to be critical consumers of an education that values their heritage, background experiences and ways of knowing. This approach is frequently referred to as *culturally relevant teaching*.

This form of multiculturalism uses students' cultures to help them create meaning and understand the world. It focuses on academic success and affirming students' cultural identities, as well as asking students to critically examine school content and processes (Ladson-Billings, 1995a). Also referred to as critical multiculturalism, this approach can be understood as "a teaching-learning paradigm in which teachers and students consciously engage in construction of knowledge, critique the various forms of inequities embedded in the educational system and strive to gain the empowerment needed to engage in culturally responsive and responsible practice" (Ukpokodu, 2003, p. 19). The terms "critical multiculturalism" and "culturally relevant" often refer to very similar approaches. Together, these approaches are race conscious. Race conscious teachers are cognizant of issues of diversity, race and discrimination and actively work towards an antioppressive climate in their classroom. They understand that race matters. Gay (2003) argues that the best teachers for students of color believe in the importance of multicultural education, are self-conscious and critical about their beliefs and understand who they teach, what they teach and why they teach it. Sheets argues that "race consciousness is an essential predisposition to eradicating racist policies and practices in schools" (2000, as cited in Brandon, 2003, p. 36). Teachers whose practice reflect this orientation understand the role of institutional racism, craft antiracist lessons, promote a positive self-image for all children and do not subscribe to "add-on" approaches

to multiculturalism (Murrell & Diez, 1997). Simply understanding that racism impacts the life chances of students of color, and acknowledging our role in disrupting these patterns, is a step in the right direction.

What about educators who do not teach children of color? Do they have a role in multicultural education? Of course. Teachers who work in all White schools, as well as those in diverse classrooms, have responsibilities in helping children value difference, see injustice and promote understanding. It is critical that multicultural education is not seen as being pertinent only in urban schools. All children have a culture, including White children. Teaching children about their culture, learning about other ways of seeing the world, discussing race and culture, dismantling stereotypes and helping students develop of critical eye towards society, politics, and policies is as relevant in suburban schools as it is in urban. In many ways, those who work in all White schools may have a more challenging task: helping to see diversity in rich and meaningful ways, where it may not naturally exist.

Drawing from culturally relevant pedagogy and critical multiculturalism, there are at least eight principles which undergird rich multicultural education. These principles are by no means exhaustive. They provide an initial framework, based on research on best practices for children of color and English language learners, which can provide a foundation on which to develop powerful learning opportunities for all children. In her research, Ladson-Billings outlines several characteristics that distinguish highly effective teachers. Her work provides us with the first four components: providing a rigorous education, supporting cultural identity, understanding the sociocultural component of teaching, and maintaining high expectations of all students (Ladson-Billings, 1994, 1995a, 1995b, 2000).

Students Deserve a Rigorous, Relevant Education

First and foremost, multicultural education is about providing students with a rigorous, challenging education. Academic achievement is a primary goal of culturally relevant pedagogy (Ladson-Billings, 2000). This flies in the face of typical notions of multicultural education. Multicultural education is not just about feeling good about one's self and increasing self-esteem (although these are fine outcomes). Rather, culturally relevant teaching is about constructing learning environments which push all students to succeed. Curriculum should not be watered down, nor should the focus be strictly on basics. The drill and kill approach is not what children of color and English language learners deserve. Children of color and English language learners need equal access to demanding, thought provoking instruction. It is a misconception that "the basics" are most appropriate. While children in urban schools may have different learning needs than other children (such as supporting English language development for ELLs), this is no excuse for limiting their curriculum to reading and math only, or for teaching decontextualized lessons based on rote memorization that expect the bare minimum. Students in wealthier schools have access to history, science, foreign languages, art, music, and drama. Children in urban schools should have similar access to engaging materials. What does it say about children's worth when we deny them this access?

Cultural Identity Should Be Supported in the Classroom

Children of color and English language learners should not feel as if their success in school hinges on their ability to assimilate. Many students feel that in order to find success in schools, they must leave bits of themselves behind, be that their language, dialect, ways of communicating, etc. Instead, students should feel that their culture is included, respected and understood by the schooling community. Successful teachers understand the cultural distinctiveness and strengths of children of color (Beauboeuf-LaFontant, 1999). Teachers support students' cultural integrity and capitalize on students' cultural heritage as a way to build academic achievement (Ladson-Billings, 1995b). Take the example of Lila, a Mexican immigrant in fifth grade. Instead of forcing Lila to speak English only, a supportive teacher could acknowledge the skill and intelligence required to be bilingual. While the teacher would provide opportunities to learn English and understand schooling norms in the US, it would not be at the expense of her native tongue. There are ways of providing students access to success in US schools without stripping them of their culture.

Teachers Acknowledge the Sociocultural Components of Teaching and Stress Critical Consciousness in Students

Successful teachers are race conscious (Cooper, 2002) and cognizant that inequities exist (Martin, 1995). They understand that "education and schooling do not happen in a vacuum" (Ladson-Billings, 2000, p. 210) and that "race and racism structure the everyday experiences of all Americans" (p. 211). Teachers do not adhere to a color blind philosophy. This is an important, yet overlooked, component. Teachers often espouse that they don't see color; they don't notice children's ethnicity. While such a stance may seem like it is a positive – in that the teacher purports to see all children as equals – it is indeed a negative. It is human nature to notice differences. It is disingenuous to say otherwise. Moreover, when we erase a child's ethnicity, we erase a piece of the child. Culturally relevant teachers build on children's backgrounds and acknowledge that different children face different barriers. They understand that a child's race or ethnicity is not something that needs to be removed or ignored.

Additionally, teachers work to build a critical consciousness in students. In doing this, students are asked to critique social policies and systems that marginalize groups of people (Ladson-Billings, 2000). Teachers expect students to be active creators of knowledge, rather than passive consumers.

Teachers Hold High Expectations of Themselves and Their Students

Teachers hold high expectations of *all* children. Students are considered capable and teachers believe all children can learn. While this dimension may seem quite basic, it is indeed one of the more critical ingredients. What we believe about students matters. If teachers believe they have uneducable children, or students who are not worthy, able or motivated, these beliefs will shade their instruction. Teachers who practice culturally relevant pedagogy are persistent and do not give up on their students (Ladson-Billings, 1995b). Teachers do not adhere to the "language of lacking" (Ladson-Billings, 1995b)

or subscribe to deficit theories that disparage students' families, life circumstances or communities. Instead, teachers approach their students with the baseline belief that all students come with talents, all students have potential and that their job as an educator is to mine these gifts from their students.

Students Experience Multicultural Content

Geneva Gay (2002) also provides suggestions for culturally responsive teaching of African American, Asian, Latino and American Indian students. Gay includes culturally relevant curriculum as an essential element in multicultural education. Banks and Banks (1995) also stress the importance of content integration (while being mindful of other dimensions of multicultural education). Part of our responsibility to students is to provide an education that includes the contributions, histories and stories of diverse people. Content which stresses cultural pluralism helps to undo the sins of omission (Gay, 1994) frequently seen in US instruction. All children should be able to see themselves and their experiences reflected somewhere in the curriculum. Moreover, teachers do not want to confine their use of "ethnic" content to African American History Month, or Martin Luther King Day. The inclusion of multiethnic literature, an exploration of the history of Central America, the addition of Japanese art or Balinese music should be year-round, natural components of the curriculum. To include African Americans in the curriculum once a year sends a message to students that the real school agenda does not include people of color, except for "special" events.

Additionally, diversifying the curriculum is not just the responsibility of language arts and social studies teachers. There are methods and content in all areas, including math and science, which can expand on the traditional knowledge base. Students can study how Hindu art reflects societal mores, how mathematical patterns are used in different cultures, or how evolution and creation is explained around the world. A component of diversifying the curriculum is simply showing students that culture shapes what people study, what people believe matters and what should be learned. Education is culturally and politically constrained. Knowledge itself, and how it is conveyed, is dynamic and context specific. These understandings can help students reconceive of their own role in the knowledge creation.

All Families Can Contribute to Their Students' Development

Rather than see parents as barriers, culturally responsive teachers reach out to families in respectful and inclusive ways. Teachers understand the realities families face, and do not view language diversity or ethnicity as deficits that need remediation (Nieto, 1999). All families, regardless of background, provide their students with necessary skills and strategies for negotiating life. Conflicts arise when learning that occurs at home is not respected, or understood, in schools. For example, while some families may have limited access to books, or infrequent opportunities to read out loud to their child, this should not be misinterpreted as a lack of interest in literacy or in their students' reading development. Instead, the family many have developed a rich oral storytelling tradition with their child, providing them with an important, but often overlooked, skill. Deficit laden beliefs about families cripple our ability to make real connections with students, families and communities. Believing that most parents want what is best for their child, and will work diligently to provide it, would serve us better.

Multicultural Education Is a Schoolwide Endeavor

Multicultural education does not just occur in individual classrooms. Schools that serve their students of color well are *structured* for equity and remove barriers to access. Nieto (2002) persuasively argues that multicultural education is about dismantling school based inequities which shape day-to-day life in schools. She cautions that teachers and policy makers must ask themselves which students have access to the best teachers, which students take advanced courses, and which students receive the most funding. Decision Advanced Placement makers should be mindful of how programs and policies, such as tracking, gifted classrooms, special education, and Advanced Placement courses can both help and hurt their students when inequitably applied. Moreover, issues of diversity and equity should not be the responsibility of a single cohort of progressive teachers. Instead, equity can be a focus by administrative design.

Multicultural Education is About Social Justice

Nieto reminds us that "multicultural education is not about political correctness, sensitivity training or ethnic cheerleading... Given the vastly unequal educational outcomes among students of different backgrounds, equalizing conditions for student learning needs to be at the core of a concern for diversity" (1999, paragraph 6). While schools can include issues of diversity in ways that stress exposure, inclusion, tolerance, improved communication or increased knowledge of others, fundamentally, multicultural education is about breaking the status quo and delivering an education that is just, critical, and life-improving to all students. Erickson (1997) suggests that multicultural education has the potential to be antihegemonic, rupturing the "established view of things... that serves the interests of those people already privileged in a society" (p. 49). He goes on to explain the when schools do not talk about racism, bias, marginalization of languages, or Eurocentrism in the curriculum, students may understand the silence as a form of acceptance, or a sense that these issues are not real concerns. While all facets of multicultural education (the technical, emotional, tangible, political, sociocultural) should work in concert with one another to foment change, the change must reflect a baseline commitment to justice.

Final Thoughts

In order to provide meaningful educational experiences for all children, a crucial first step is considering who we are teaching and towards what ends. Children of

color and English language learners represent a large – and growing – segment of our student population. As we strive to better differentiate instruction to meet the needs of all learners, culturally responsive pedagogy can provide powerful lessons on how to address students from diverse backgrounds. The discussion of multicultural education presented here provides initial steps. There are many ways to define, interpret and implement multicultural education in the classroom. The reader will notice that I have not provided a "checklist" of ways a teacher can be culturally responsive. Unfortunately, the task at hand is not so easy. As with any other educational endeavor, individual context matters. Whether your students are immigrants or second generation, whether they are from rural or urban backgrounds, whether they are new to English or not shapes which strategies that will be most useful. Through this chapter, I wish to stress the importance of beliefs, expectations and quite simply, open-mind-edness. As teachers work towards providing a rich education for all students, a race conscious, culturally relevant approach provides one pathway to success.

Biographical Note

Kerri Ullucci, PhD, is an assistant professor of Education at the University of Massachusetts, Dartmouth. She teaches in the fields of elementary literacy and urban schooling. Her research interests include race and racism in schools, teacher preparation and multicultural education. Dr. Ullucci's recent work has been published in *Urban Education, Multicultural Education* and the *Journal of Educational Controversy*. She is currently working on a study addressing the factors which support urban adolescents' engagement in schooling. Dr. Ullucci is a former classroom teacher.

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TEACHING IN LARGE AND SMALL CLASSES

Peter Blatchford, Anthony Russell, and Penelope Brown

Introduction

In many countries over the world there has been a hotly contested and widely reported debate over the educational consequences of class size differences. Opinions vary from those academics and policy makers who argue that class size reduction is not cost effective to those who argue that it should be a cornerstone of educational policy. Despite the debate, there is general agreement, from both experimental (e.g., Finn & Achilles, 1999) and naturalistic studies (Blatchford, Bassett, Goldstein, & Martin, 2003), that smaller classes have positive effects on pupil academic performance, if introduced immediately after school entry, that is, with the youngest children in school.

However, it is now widely appreciated that attention needs to move from studies of the effects on academic outcomes to better understanding of the classroom processes that might be involved (Anderson, 2000; Finn, Pannozzo, & Achilles, 2003; Grissmer, 1999). In this paper we concentrate on connections between class size and these classroom processes such as teacher and pupil behaviour and relationships, relationships between pupils, pupil engagement and involvement. Rather than a detailed review of research evidence, we are more concerned with the educational implications of class size differences, with a particular emphasis on maximising the benefits of small classes for pupil learning.

The paper has four sections:

- 1. A review of key classroom processes affected by class size
- 2. Examination of factors that can modify or moderate effects of class size on classroom processes
- 3. Exploration of alternatives to Class Size Reduction (CSR)
- 4. A look at some implications for practice and policy

Key Classroom Processes Affected by Class Size

In this section we will summarize key findings from research. Given space limitations we will not present individual research findings but present overall trends drawing on main reviews, namely, Anderson (2000), Biddle and Berliner (n.d.), Blatchford and

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching*, 779–790. © Springer Science+Business Media LLC 2009 Mortimore (2004); Blatchford, Goldstein, and Mortimore (1998), Cooper (1989), Ehrenberg, Brewer, Gamoran, and Willms (2001), Finn et al. (2003), Galton (1998), Grissmer (1999) and Hattie (2005). We are aware that these studies are Western orientated in the main, but we also draw on a review chapter written for the Asia-Pacific region, that drew on some Asian studies (Blatchford and Catchpole, 2003). For illustration and amplification we feature findings from a large scale naturalistic UK study of class size effects (the Class Size and Pupil Adult Ratio – CSPAR) project, see, e.g., Blatchford (2003), Blatchford, Bassett, and Brown (2005), Blatchford et al. (2003), Blatchford, Moriarty, Edmonds, and Martin (2002). This project studied in a comprehensive way the effect of class size and pupil/adult ratios on pupils' academic attainment and on classroom processes such as teaching, pupil attention and pupil relations. It tracked over 10,000 pupils in over 300 schools from school entry (at 4/5 years) to the end of the primary school stage (11 years). It featured a multi-method approach and integrated quantitative and qualitative research. It used a non-experimental design, measuring the effects of natural variations in class size, using a longitudinal follow-up study of children from school entry, and sophisticated multi-level regression statistical analyses in order to determine effects of class size controlling for other factors, such as pupil prior attainment.

A General Model of Effects of Class Size in Relation to Classroom Processes

There are several models of class size effects, notably that by Anderson (2000). Here we use an amended model first used to summarize findings from the first stage of



Fig. 1 Model of connections between class size and classroom processes

CSPAR (Blatchford, 2003). This is not meant to suggest that this is in some sense the correct version, but rather seems a good way of organizing key findings (Fig. 1).

Teachers

Teacher Individua\l Attention to Pupils

Perhaps the most consistent finding is that the most important classroom process, affected by reduced pupil adult ratios and class size, is individualization of teaching. This increase in individualization is expressed in different ways but essentially means that the smaller the class the more likelihood there is that a teacher will spend more time with individual pupils. Results from the CSPAR systematic observations, for example (Blatchford et al., 2005), showed that overall there was a heavy reliance on whole class teaching and individual work in primary schools but that pupils in small classes were more likely to experience one-to-one teaching and were more often the focus of a teacher's attention. Potentially at least this suggests that smaller classes allow more differentiation of teaching (but see below). In this vein, Anderson sees small classes encouraging a more personalized and appropriate curriculum for individual pupils.

More Teaching Overall

In smaller classes there tends to be more teaching overall. The CSPAR study showed that throughout the primary years there was more teacher to pupil talk in smaller classes that was directly concerned with the substantive content of subject knowl-edge, communicating concepts, facts or ideas etc.

Easier Classroom Control and Management

A number of studies have reported that pupil discipline tends to be more difficult in large classes and more of an intrusion into the teaching and learning process. This means that large classes present more challenges for classroom management and pupil control.

More Time for Marking, Assessment and Planning

Finding time for marking, planning and assessment is more of a problem in large classes.

Less Teacher Stress/Compensatory Efforts

Many studies report that teachers are put under more strain when faced with large classes. This comes about probably because of the increased demands on them but also because they are faced with compromises to their preferred pedagogy. Teachers often believe that learning is best served by maximizing individual attention to pupils and by the tradition of supporting work to be done individually by pupils. It is small wonder that teachers of large class sizes report that they are exhausted and pupils' learning needs are not always fulfilled.

Better Relationships with and Knowledge of Pupils

Much of the evidence for the next two facets stems from more qualitative research, including teacher reports, so is less easily verifiable, but there is a fair degree of agreement that in smaller classes it can be easier for teachers to spot problems and give feedback, identify specific needs and gear teaching to meet them, and set individual targets for pupils. Teachers in small classes tend to experience better relationships with, and have more knowledge of, individual pupils.

More Flexible/Adventurous Teaching

In small classes there is evidence that teachers can be more flexible in their teaching and more adventurous rather than sticking to a restricted range of teaching methods and curriculum coverage.

Pupils

Pupil Attentiveness/Off-task Behaviour

Common sense and logic suggest that with more children in the class there will be more potential for distraction, and more possibility of being off task, and this is indeed a finding reported by a number of studies. Finn et al. (2003) and Cooper (1989) argue for a connection between small classes and increased student engagement in learning. There are two kinds of inattentiveness: an externalizing form in the sense of overtly disruptive behaviours and 'mucking about', and a more internalizing form in the sense of being disengaged and distracted from work. Finn et al. (2003) conclude that the research evidence supports effects on both types: students in small classes in the elementary grades are more engaged in learning behaviours, and they display less disruptive behaviour than do students in larger classes. They also conclude that effects on processes appear to fade out by later grades and that class size seems to affect student engagement more than teaching. In the CSPAR study, we found in the case of 4/5-year-old pupils more off task behaviour in larger classes, but especially more passive off task behaviour - more disengagement - when working on their own. However, we found no effects on pupil attentiveness in 10/11-year-old pupils, which we attributed to the higher degree of control exercised by the UK curriculum and preparation for end of Key Stage tests at this age.

Active Involvement with Teacher

Larger classes can also lead to pupils having a passive role in class. Systematic observation research in the UK found that two allied behaviours were more common in large classes: times when the child is simply listening to the teacher and times when they are not singled out by the teacher, either on a one to one basis or in a group or whole class situation; they are one of the crowd. Conversely, in smaller classes pupils were more likely to interact in an active way with teachers. This was seen in the greater likelihood of initiating and responding to teachers and sustained contact with them.

Peer Relations

It might be expected that in larger classes with more competition for a teacher's attention, pupils would turn to each other and pupil-pupil interactions might increase. In the CSPAR there was more pupil-pupil interaction overall in larger classes in the early years of primary education but by the later primary school years there was no evidence for such an effect. It is likely that this result owed much to the strong pressure on pupils to accord to particular curriculum and work demands, which left little time for interactions with peers.

It might be expected that in larger classes there would be more negative and aggressive behaviours between children. This is supported by research on children at nursery level but other research with older pupils seems less clear. In the CSPAR we did not find that pupils in smaller classes had better peer relations; indeed, peer relations were if anything worse.

Size and Number of Within Class Groups

Class size and grouping of pupils in the classroom are closely linked. As the size of the class increases, the size and/or number of groups necessarily increases. Group size can have effects on teaching, e.g., through the amount and quality of teacher-pupil interaction. Larger groups can result in more off task behaviour, and mask the particular needs of individuals within them and allow some to 'freewheel'. Some groups can miss out on a teacher's attention.

Many studies find that though pupils are often seated in groups they only infrequently engage in collaborative work. Worryingly, research finds a tendency for less groupwork to take place in smaller classes, no doubt because teachers are availing themselves of the opportunities for more contact with individual pupils. We return to this and other findings below.

Factors Moderating the Effects of Class Size on Classroom Processes

There are several key ways in which the effect of class size on classroom processes is moderated. It is important to be clear about these because a good grasp of the relationships involved can inform practice and policy. They also suggest directions for future research.

Overall Class Sizes

Research evidence and debate on effects of class size are usually conducted within the parameters of class sizes normally experienced in countries within North America, Europe and Australasia. However, average class sizes and Pupil Teacher Ratios (PTRs) can vary greatly between countries, and in some countries, e.g., in Asia, can be very much larger. Hattie (2005) has pointed out that different class sizes will affect what is considered effective in teaching. Very different styles of teaching will be necessary, and different class size effects can be expected, when faced with class size bands as different as 80+, 30-80, and 15-30 students in a class.

Age of Student

The STAR and CSPAR projects are consistent in showing that effects on academic outcomes are clearest with the youngest students and there would seem to be clear support for policies involving CSR in the first years of school. There is, though, still debate about whether CSR effects are best seen as age dependent or a 'start up' effect. If the former, then the class size effect cannot be separated from the age of the children; small classes work because the children are new to school, and because small classes give the child and the teacher the opportunity for children to learn to learn, to learn how to be students. If the latter, then it may be that CSR is advantageous soon after strategic points of transition in student's school lives, e.g., primary to secondary education. Research evidence to settle this debate is not available.

Just as age of child is a factor when considering effects of class size on academic outcomes, age can also be a factor when considering effects on classroom processes. Putting together results reviewed by Finn et al. (2003), with those from the CSPAR, suggests that age may influence effects of class size on pupil attention, with the youngest pupils most affected, while effects on teacher pupil interactions (see above) are evident throughout the primary years. Relatively little is known about the effects of class size on classroom processes in older school pupils and more research on older age groups is needed.

Attainment Level of Student

Research shows that the effect of class size differences vary for different kinds of children in schools. In general, smaller classes seem to benefit students most in need academically, and who thus have most ground to make up. These findings further suggest where targeting of resources (in this case small classes) might be best directed. However, the relations between class size, pupil attainment level and class-room processes are less clear.

Curriculum

Class size effects can vary by school subject. Rice (1999) found that in mathematics, but not science, as class size increased, less time was spent on small groups and individuals, innovative instructional practices, and whole group discussions. In the CSPAR study, the overall effects of class size on individualized attention were found in all subjects but English, probably because English is the most discussion based subject and relies less on questioning of individual pupils. Also teachers in larger classes tended to use more groups, but for science only, perhaps because of the nature of the curriculum and the use of group experiments, and also because the value of group work was not recognized in English and mathematics. One direction for future research would be to identify more precisely ways in which class size effects vary in relation to particular school subjects and student age, and to explore factors that explain any differences found.

School Size

We also note here that strictly speaking a full understanding of class size effects would need to distinguish effects from those connected to school size. Understandably research on class size effects has tended to consider the class as a discrete unit, rather than set it in the wider context of the school. But it is possible that some effects of class size on teaching, learning and attainment may be explained by processes at the school level, which may in turn be connected to the size of the school. Large schools may, for example, have different kinds of educational interactions and ethos to small schools, and this might be reflected in processes evident within classes within these schools. This suggestion would need to be examined carefully. In general, research on size of school in relation to academic outcomes has not produced consistent results. From the perspective of this chapter, however, such research would need to disaggregate the effects of class size from school size, in order to show where school size has an independent effect on outcomes (i.e., that is not explained by class size). As far as we are aware this has not been done in a systematic way.

Alternatives to Class Size Reduction (CSR)

One general approach to the efficacy of class size reduction is to compare it with alternative educational initiatives. Hattie (2005) argues that we should consider effects of class size not in relation to zero – i.e., having no effect – but in comparison with other interventions, e.g. tutoring, phonics training, 'Success for All'. In general, CSR fares badly in these comparisons. But this is not a fair test. Class size is not an intervention like phonics training but simply involves changing the number of people in a room – i.e., changing a classroom contextual factor – with no control over what happens in the room. It should be no surprise that reducing class sizes in and of itself does not result in gains in student achievement as obvious as those stemming from involvement in a defined educational intervention. We argue that a fairer test is to compare it with effects of other, alternative classroom contextual changes. Here we consider three alternatives.

Reduced PTRs

It is not always realised that PTRs are not the same as class size, in that PTRs refer to the overall ratio of students to teachers in a school, not all of whom will have a moment by moment instructional role. Is having two classes of 25 pupils each with a teacher the same as a class of 50 with two teachers? The evidence suggests they are not, and

Finn et al. (2003) argue this may be because there is something special about a small class in terms of the social psychological environment it provides.

Increase in Teaching Assistants

An alternative use of funds is to invest in increased numbers of teaching assistants. This is a much adopted policy in many countries but it is not at all clear it can be considered a better alternative to CSR. The evidence suggests that teaching assistants do not always have a positive effect on student outcomes, and one reason for this is because assistants are not always well trained and clear about their role, and their deployment can be ad hoc or only connected to pupils with special needs. At very least one would need to carefully address the deployment and pedagogical approaches involved in having assistants in classrooms. Currently, we have little understanding of the pedagogical practice of assistants and teachers and how each can complement the other.

Flexibility in Classroom Grouping

Another contextual alternative is greater flexibility of student grouping, e.g., taking out small groups to be taught in a different classroom or the library. It is agreed that this can be a valuable practice, but does not mean it is a better alternative to smaller classes. Flexibility in grouping can also require a good deal of preparation and organisation skills, if it is not to lead to disruption and lack of continuity. Moreover, if groups are used for collaborative work between students, this will also require the development of relational skills to help students work well together (Blatchford, Galton, Kutnick, & Baines, 2005). It may be that students, especially younger ones, benefit from stability of personnel, both teachers and other students, and that small classes can provide a secure base for socialising younger pupils into school learning.

Current evidence therefore suggests that these alternative classroom contextual changes are no better than CSR, and involve difficulties not always taken into account. Overall, though, there is a need for studies to compare systematically different contextual approaches.

Implications for Practice and Policy

We can therefore think of class size as one type of classroom contextual factor, and we can also conceive of it as existing in dynamic relation with two other important factors – first, the curriculum and assessment arrangements, and, second, teachers' pedagogical approaches. It is likely that the relationship between the three key factors will vary in different countries and cultures, but in many countries it seems likely that large classes will present problems for curriculum coverage and preferred pedagogies. This is not the place to assess curriculum and assessment arrangements, nor Governmental or State policies on class sizes. This leaves pedagogy, and we feel it would be helpful to think more strategically about the best pedagogical approaches with classes of a different size.

It has often been pointed out that teachers do not necessarily change the way they teach when faced with smaller classes and this might well account for the relatively modest effects of class size on achievement. But how should teachers change the way they teach? As Galton (1998) has pointed out, one problem is that we do not have a lot of knowledge about effects of class size on teaching on which to base practical advice. Also, and more fundamentally, we do not have a well worked through theory underpinning teaching and pedagogy. Differences in practice between expert and competent teachers are therefore hard to pin down, and it is hard to show competent (or worse) teachers how to become expert, and it is difficult to know how to advice teachers when faced with different sized classes.

It may be helpful to distinguish those processes most likely to follow from differences in class size and those that are potentially likely to follow but which will depend on what a teacher makes of a smaller class. Drawing from the review above, it seems likely that the following things are likely to follow from smaller classes:

- 1. More individualisation of teaching
- 2. Easier classroom control
- 3. More time for marking, assessments and planning
- 4. Less teacher stress

But it seems likely on the basis of the evidence that the following benefits will require more careful thought in order to maximize the opportunities afforded by small classes.

Differentiation

A recurring theme of this paper has been the value teachers attach to individualization of instruction, and differentiation, and the way this is compromised by large classes. If teachers are serious about implementing a more individualized pedagogy then they need to think through ways of maximizing individual attention. Some teachers do not take advantage of the possibilities of increased individualization, for example, by still relying on whole class teaching with very brief interactions with individuals. Conversely, teachers can pressurize themselves by seeking to maximize individual contact – even in a small class this can be difficult. The overall aim, in line with Anderson's (2000), would include efforts to increase personalized, appropriate instruction. One strategy is to teach more to small groups. This would have the benefits of interactive whole class teaching, but would be potentially more focused and better differentiated in terms of pupil ability. It is in such contexts that one might seek to maximize the effectiveness of individual attention.

Quality of Teaching

As suggested above, smaller classes can enable more adventurous and flexible teaching. Obviously there can be excellent teaching in large classes but there are likely to be more constraints on what is possible. Smaller classes allow more degrees of freedom and this can allow greater flexibility. It is not intended to give specific details here, because this will in any case vary between subjects and stages of education, and will also be grounded in different school cultures (see conclusions below).

Effective Collaborative Learning

One danger to be warned against is to see all the benefits of smaller classes in terms of increased opportunities for individualized teaching. We need to be careful not to overlook the benefits that can stem from other contexts for learning, for example, pupils learning together with a deliberate attempt to minimize the teacher's input. It has been found that truly collaborative group work can be used as part of an everyday pedagogical approach, and can have positive effects on pupil achievement and classroom interactions, though it requires careful development and training for both teachers and pupils (Blatchford et al., 2005). Teachers could make better use of small classes if they did not reduce group instruction. It can also help teachers with large classes, in terms of maximizing their time with other pupils, and encouraging independence in learning.

Conclusion

Rather than considering CSR in comparison with educational initiatives, such as tutoring or phonics training, we have argued that it would make more sense to compare it with other classroom contextual changes, like extra support in classrooms. But one can go further. We have suggested several ways in which CSR can be accompanied by pedagogical changes to enhance beneficial effects for students. It would then make sense to evaluate CSR in conjunction with these particular interventions, i.e., it is the combined effect of class size reduction along with appropriate pedagogical and curricular changes that is of most relevance, and which needs to be evaluated.

But we end with another point. It may be too simplistic, especially in an international context, with its huge variety of resourcing, structures, cultures and pedagogies, to seek to identify particular educational practices that will be affected by class size and which should be adopted in small classes. Rather, we may do better to be clear as educators about the educational aims that we consider important and then think through carefully where class size reductions can help. Teachers will vary in their educational goals for very good reasons - because of the age of pupils, the subject area, the emphasis at a given point in the year, in response to a particular cohort of pupils, and because of fundamental differences of opinion about appropriate pedagogical approaches. Teachers may be better equipped, when given the opportunities afforded by small classes, if they consider educational principles rather than specific practices. So if we consider well rehearsed polarities in educational goals - performance versus mastery orientation, teaching for knowledge versus teaching for understanding, teaching for self or task versus teaching for the pupil - we may conclude that smaller classes can help the latter polarity -i.e., allow teachers to be more mastery, understanding/learning and pupil centred. The task is then to consider how small classes can help.

We are not suggesting that teachers undertake this in isolation but that it be approached at different levels – school, local area or state. There is also a clear role here for initial and continuing professional development where we feel that there could be a much bigger role for a close consideration of classroom contextual features, of which the number of children in the class is one. Some have argued that professional development is a better investment than CSR, but we argue that they should not be seen as in opposition; rather, professional development should be used to help teachers harness the opportunities of small classes, and help them develop strategies for realizing educational objectives in large classes.

Biographical Notes

Peter Blatchford is Professor in Psychology and Education at the Institute of Education, University of London (website: www.ioe.ac.uk/PHD). His main area of interest is social developmental processes in school settings. He directed a large scale research project on the educational effects of class size differences in children aged 4–11 years which has led to a number of publications including the book *The Class Size Debate: Is Small Better?* (2003, Open University Press) (see www.classsizeresearch.org.uk). He also co-directed a major UK research council funded project that developed and evaluated a programme to improve the effectiveness of pupil groups in classrooms (www.SPRinG-Project.org.uk). He is currently directing a large scale study of the deployment and impact of support staff in England and Wales – the DISS project (www.supportstaffresearch.org.uk). He has an international reputation for his work on peer social life in schools and school breaktimes/recess.

Anthony Russell has more than 30 years experience in education, mostly in primary school contexts, as class teacher, deputy head teacher, initial teacher training lecturer, Local Education Authority advisor and consultant on curriculum development projects in Africa, Asia and Europe. He has carried out research for the Department for Education and Skills on pupils' progress in practical science skills, the introduction of the Key Stage 3 Standard Attainment Tests and the effects of class size and adult pupil ratios in Key Stage 2 classes in England. The role, status and impact of teaching assistants has been of particular interest and this has been pursued further in the DISS (Deployment and Impact of Support Staff) Project, from 2003 to 2007, where the focus has been on the quality of pedagogical interactions with pupils.

Penelope Brown is an experienced researcher with a long history of working with children of all ages. Previous work has included observations, experiments and assessments with individuals, groups and classes. She worked on the Class Size and Pupil Adult Ratios project and is currently working on a large scale project on the Deployment and Impact of Support Staff in Schools (DISS). Penelope has several areas of interest including dyslexia, particularly diagnosis, deficits and teaching programmes. Previous research has also included work on redintegration; left-handedness and development of dyslexia spelling programmes.

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TEACHING AND LEARNING IN THE ICT ENVIRONMENT

Bronwen Cowie and Alister Jones

Introduction

ICTs are now a central means to be socially, economically, culturally and politically involved in twenty-first century society (Selwyn and Facer, 2007). They are integral to the global flows of knowledge, people and services that characterize the knowledge economy. In this information rich society knowledge is being reconfigured. Knowing and learning are now as much to do with access and participation as they are to do with the acquisition of skills and knowing that. Internationally, governments have endorsed the need for students to be ICT and information literate. The contention is that students will need to be able to access, integrate and evaluate information. construct new knowledge and communicate with others if they are to take their place as active citizens in an increasingly complex and information rich world. Also evident is the view that ICT can enhance student learning within traditional curricula subjects through a positive impact on student motivation and engagement, and that ICT has the potential to change both how and what students learn. To date however the impact of ICT technologies on education and schools has lagged behind what had been expected. This chapter is backgrounded against a national evaluation project on the provision of government-funded laptops to New Zealand schools and teachers carried out by the authors (Cowie, Jones, & Harlow, 2005). This project provided insights into the affordances of laptops/ICT use in schools and the conditions that support ICT use. In this chapter we explore the various dimensions of ICT use by teachers and students and what enables and constrains these.

Contemplating Classroom Uses of ICT for Teaching and Learning

There is ample research evidence that access to ICT technologies on its own does not lead to changes in teaching and learning, the teacher has a central role in this. Teacher knowledge of and expertise with ICTs, singularly and in combination, is

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important but more important still are teacher understandings of the purposes and potential value of ICTs. Teacher tolerance of ambiguity and beliefs about the relative roles and responsibilities of teachers and students also have a substantial influence on teacher classroom use of ICTs (Scrimshaw, 2004). The alignment between the affordances of a technology and teacher beliefs about a subject are important albeit teacher beliefs and practices are shaped in part by the culture for the teaching of the subject that exists within a particular school. The juxtaposition of teacher personal beliefs, subject-cultural factors and the local culture for ICT use is of interest given the prominence (and dearth) of ICT within certain subject areas. Secondary teachers in New Zealand from different subject areas seem to use their laptops in qualitatively different ways in the classroom for instructional purposes. Science teachers are almost uniformly enthusiastic about the use of simulations and animations to mediate between concrete and abstract representations of concepts and the use of real-world data to stimulate student interest and engagement. Physical education teachers use the laptop video capabilities for formative and summative assessment of student performance, both individual and team, curricular and extra-curricular. English teachers are more ambivalent, the cultural value accorded to dialogue and debate seemingly at odds with the wide spread use of ICT-based whole class teaching.

Current ICTs not only offer new tools for communication but also new tools to think with. Computers have on board a range of increasingly sophisticated representational tools that support real-time dynamic interactive visual representations, data analysis and modeling. They include tools that support the multimodal expression and discussion of ideas within and across settings. ICTs make it evident that thinking can take many forms - visual, verbal, auditory, kinetic and a blend of these modes. It is perhaps for this reason that research on the use of ICT is at the forefront of the shift to view learning as situated and distributed, rather than an individual cognitive process (Salomon, 1993). In this view the tools used to mediate action shape and constrain that action leading to shifts in power and the shape of knowledge (Werstch, 1998). As such ICT technologies have the potential to support current goals for education including those of collaboration, reflection, knowledge synthesis and creation, and the development of the skills and dispositions for life long learning. This said we are only beginning to consider the challenges this poses for schools as social organizations. Research and development studies on teacher use of the Internet, interactive whiteboards, games and immersive participatory simulations, and personal mobile ICT devices have illuminated some of the possibilities.

Use of the Internet in the Classroom

The Internet and broadband technologies offer the possibility of breaching the spacetime boundary of classrooms. Student use of the Internet, while it demands a reasonable level of English reading skills, offers expansive opportunities for student project work. Students working on authentic problems can access resources that are more complex and interactive. They can communicate with experts working in their area of inquiry. Such access can support more active, involved and self-directed learning and the development of extended learning communities. The authentic, up-to-date, multimodal material and data that can be accessed via the web can be motivating and create a sense of contact with the outside world. However, students need to know how to navigate the web with safety. They need to learn how to respond to inappropriate material and where and what it is safe to publish online. Teachers need to balance student safety with the benefits that come about when students take ownership of and publish their work. For example, in the New Zealand setting the Biotechnology Learning Hub provides schools with access to New Zealand scientists and their current research via a specially designed combination of text, images and video. The Hub provides a quality assured forum for students to pursue questions that are of interest to them and their community. However, it needs to be remembered that students need to be supported in the development of learning to learn and information literacy skills. Students need to be scaffolded to take more strategic responsibility for their learning.

Despite its apparent possibilities the challenge to teachers from the use of the Internet as a teaching tool cannot be overestimated. Research in ICT is converging with classroom-based research to highlight the role of teacher pedagogical content knowledge (Shulman, 1987) in shaping teacher pedagogical decision-making in both planning and interaction (Loveless & Ellis, 2001). Materials on the Internet are subject to little or no censorship. The Internet is unorganized, unstable and forever expanding. Very little of what is there is designed for teaching and learning. Locating suitable material for different age levels and areas of interest therefore can be complex and time consuming. Few purportedly educational resources support inquiry or include features that could lead to the development of learning communities. Teachers need considerable content knowledge to assess the merits of different sites and substantive pedagogical content knowledge to transform web-based materials into teaching and learning activities. Materials accessed via the Internet need to be authenticated and placed into a pedagogical context. The teacher plays a pivotal role in mediating the use of the Internet to support student learning and learning to learn.

The Interactive Whiteboard in the Classroom

Research dating back to the 1970s has found that teacher-student interaction in a whole class setting is teacher dominated and actively involves only a few students. The interactive whiteboard has the potential to both strengthen and undermine this dominance. It can serve as a presentation tool that enables teachers to draw seamlessly upon a variety of multi-sensory resources thereby increasing student motivation and engagement with concepts. It can serve as a recording device for text, images and drawings that can be recalled as resources in later talk. It can support student engagement because students enjoy interacting physically with the board, manipulating text and images. Interactive whiteboards have the capacity to present for discussion student work which helps keep a class on task and raise student self-esteem. This said, while the

research literature provides evidence that it can and does impact on student motivation evidence about impacts on student achievement is harder to find.

Social Software, Games and Immersive Participatory Environments

The current trend is towards software that supports the creation of communities and resources that bring individuals together to learn, collaborate and build knowledge. Social technologies such as blogs provide a forum for discussion. A typical blog combines text, images and links to other blogs, web-pages and media related to the topic under discussion. They allow people to create and contribute content not just access information from the web. In the best examples readers are able to leave comments in an interactive format. The suggestion is that participatory learning environments on the Internet will look more like Bebo, YouTube and MySpace. Researchers are exploring how to leverage for educational purposes the affordances of gamebased technologies which support collaboration, inquiry, consequential action and the exploration of situated identities (Gee, 2004). In science education, for instance, specially designed immersive participatory environments have been used to engage students in collaborative socio-scientific inquiry (see for example Barab, Sadler, Heiselt, Hickey, & Zuiker, 2007). These environments involve learners in building understanding through the collaborative construction of an artifact or shareable product. Students come together to construct a virtual reality, play with animated puppets, build a 3D model of solar system or solve an environmental or health problem. These environments have the potential to engage learners in situations ranging from an exploration of the structure of DNA to that of the surface of the moon. They can allow individuals who are separated by space and time to collaborate via educational adventure projects and games; they can allow learners to visualize phenomena and bring museum artifacts to the hands of learners.

Personal Mobile Technologies: Laptops, Digital Cameras, Mobile Phones

ICT hardware is becoming increasingly portable and powerful. The use of computer technologies is no longer confined to desktop and office settings. Users now have access to highly portable and personal computing systems that they can use anytime and anywhere. Governments worldwide have shifted to provide laptops to teachers, and in some instances students. In comparison with desktop computers laptops provide a more flexible context for learning about and use of ICTs. Laptops can be carried from class to class, and they can easily be taken home. Portability coupled with exclusive use means that laptop users can have the same set of tools and products of work available to them throughout the school day, and at home. Thus, laptops go a long way towards meeting the assertion that, 'any given technology can support learning only to the degree that it is available for frequent, integral use within and outside school' (Means, Roschelle, Penuel, Sabelli, & Haertel, 2003, p. 165). Our research is indicating that teacher access to a laptop for their exclusive use has supported previously reluctant computer users. Teachers are taking advantage of the flexibility laptops provide in terms of time and space of ICT use. They are appreciative of the greater sociability and collaboration it affords in work practices, irrespective of where, when and with whom they choose to work. Greater familiarly and comfort with ICT has led to substantially increased use for administration and lesson planning and preparation and increased use of ICT for teaching and learning. These findings resemble those in other contexts (see for example Cunningham, Kerr, McEune, Smith and Harris, 2004).

Digital cameras on the other hand are being used extensively in classrooms. Teachers are using digital photographs to enhance student motivation, as a source of feedback, to record student achievement, and to provoke student questions and thinking. In New Zealand early years teachers and children are using digital photographs to document student 'learning stories' which then serve as a forum for teacher, family and child dialogue about and feedback to the child about his or her learning (Carr, 2001).

Cell phones are the ICT tool that has perhaps contributed most to the increased connectedness between people. Their use now permeates all aspects of our daily lives. Despite their ubiquity, mobile phones have not as yet played any substantial role in schools, other than that of a nuisance. Research is just beginning to explore the affordances of cell phones for teaching and learning in areas such as language learning.

iPods are relative newcomers to the ICT scene and are used for podcasts. While computers are better at managing various types of visual and textual information than mobile phones, iPods technologies are more portable and affordable. Just as importantly, mobile phones and iPods are more desirable technologies to the extent that most students own, or aspire to own, a mobile phone irrespective of their socio-economic status. It remains to be seen how and to what effect these technologies might be conscripted to support student capabilities and dispositions for life long learning (Hoppe, Joiner, Milrad, & Sharples, 2003).

Wider Professional Uses of ICT

Research on teacher computer use often focuses on use for teaching and learning and then suggests teachers use ICTs to reinforce and reproduce their existing practices, even in ICT rich environments (Cuban, 2001). Over recent years the development of more flexible and powerful ICT technologies and the Internet has opened up new possibilities for teacher professional use of ICT. Indications are that teachers are making substantial use of ICTs out of the classroom for tasks that inform their teaching (Bebell, Russell, & O'Dwyer, 2004). For instance, teachers in New Zealand using laptops report that increasingly they are incorporating multi-sensory materials and authentic data, accessed via the web, into lesson materials. Collegial development of and the sharing of lesson materials is now common practice reportedly because digital materials can easily be customized, searched and archived.

Teachers are making use of student data management and analysis software and using the information they generate to meet school and national teacher accountability requirements and, in some cases, to inform teacher and school formative assessment practices. Teachers consider computer/ ICT use for administration and management tasks has led to efficiencies through the streamlining of these tasks. Teachers have moved to word processed reporting to parents. The prevalence of this amongst New Zealand teachers with laptops suggests use for reporting was driven by more than teacher goals: computer-based reporting had become a school requirement. The use of email for informal communication with parents, with colleagues in the same and other schools to share ideas and set up extra curricular school events, and with students outside of school time is on the rise. Teacher perception is that these wider ICT uses have led to their having more time out of class for lesson preparation and in class for interaction with students. These changes reflect an integration of ICT across the multiple dimensions of teachers' professional work and lives.

Access to Conditions Supportive of ICT Innovation and Integration

All organizations face challenges with the adoption and integration of ICTs into organizational and individual practices (Langer, 2005). Schools are no exception. Research on teacher adoption of ICT has generated an extensive list of contextual, as well as personal, factors to account for the variation in teacher integration of ICT. Of these, access to professional development, leadership, the wider policy context and ICT infrastructure are key.

Government investment in ICT hardware has not always been complemented by investment in teacher professional development. In their attempts to integrate computers/ICT into their work supported by limited formal and funded professional development, teachers have turned to colleagues for help and support. Peer mentoring can address teacher self-identified needs. It affords easy access to follow-up assistance in the context where the need for the assistance occurred and where it is to be used whilst simultaneously helping to create a secure environment for exploring the use of ICT in teaching. However, if teachers and schools rely solely on collegial help and local good practice opportunities to learn are necessarily distributed in random and ad hoc ways (Dale, Robertson, & Shortis, 2004). Teacher access to someone with the pertinent expertise and a willingness and ability to share will determine opportunities to learn. Equity of opportunity cannot be assured without some form of intervention. On the whole school organizational structures and cultures provide few opportunities for teachers to explore and experiment with ICT use. Time to experiment is important because, as Debra Meier (1995) points out, 'Thoughtfulness is time consuming. Collaboration is time-consuming. The time they both consume can't all be private time. late-at-night at-home time' (Meier, 1995, p. 108). In New Zealand clusters of schools and teachers, working together to explore and extend their use of ICT have been able to address the need for diversity of input and lateral capacity building as described by Fullan (2005). The cluster model has successfully addressed the fact that the time and expertise required to innovate is often beyond the capacity of a single school or teacher.

Leadership for ICT innovation is essential for the management of changes in school structures and systems and the teaching and learning process that can arise from the

use of ICT technologies (Cuban, Kilpatrick, & Peck, 2001). Successful implementation and integration depends upon shared goals across the various organizational levels within a school. School-based policy and subsequent practices are shaped by the principal's /senior managements' knowledge and expertise and the advice available to them (Dale et al., 2004). Professional development and opportunities to share successful practice are just as important for leaders as they are for teachers. In the absence of sufficient experience and understanding questions about possibilities are shaped by locally available answers.

It appears that a critical level of ICT infrastructure must be reached before teacher ICT skills have an impact and the level of skill required depends on what is being demanded of teachers. So for example, if the requirement is for the use of email for communication the infrastructure is likely the limiting factor. Where the development of new lesson materials is a focus teacher expertise in the use of a word processor and in accessing and searching the web are more likely to be the tipping point. School ICT infrastructures are however just as much a reflection of past, as they are present priorities. They reflect the intersection of national and and school policy decisions over time. In New Zealand, for example, the current diversity in school technological infrastructures is a consequence of the differential value placed on ICT by schools since 1989 when the government introduced a school self-management regime (Lange, 1988). The New Zealand laptops evaluation suggests that schools with a longer term commitment to ICT use not only have better-developed technological infrastructures, but also greater access to on-site expertise, and thus have been better able to anticipate and provide for teacher needs arising from the introduction of government subsidized laptops for teachers. Schools that accessed laptops as a mechanism to stimulate ICT use, particularly small and rural primary schools, have struggled to access the expertise needed to support informed decision making about networking and other systems. They have struggled to raise the funds needed to purchase these resources. The introduction of laptops prompted further investment in ICT infrastructure in most schools but the focus of this investment has been qualitatively different in different schools, consequent on the existing technological infrastructure (hardware, software, and personnel with technical knowledge and expertise). The findings of the laptops study highlight that school and teacher response to a particular policy does not take place in a vacuum: responses are shaped by previous policies, as they have become embedded in local organizational policies and practices and supporting material resources and technological infrastructures.

Any analysis of the impact of ICT cannot afford to decontextualize it from the wider social and political variables that shape the larger context of schools (Selwyn, 1999). National policy environments contribute to differences and challenges in the processes of initiating, diffusing and sustaining innovative ICT practices within and across school systems (Kankaanranta, 2005). Very often however these policies are inconsistent and contradictory. For instance, the use of ICTs such as computer analysis systems (CAS) may be encouraged for mathematics teaching and learning but unacceptable in formal examinations. Teachers may be able to record student attendance data but school national audit procedures may require paper-based evidence. When national policies and programs target all the components of the system in a

coordinated and coherent way reform-based changes are mutually reinforcing and actual change is more likely (Kozma, 2005).

To this point, teacher opportunities for professional learning, leadership, ICT access and policy implications have been discussed as if they are independent but teacher ICT use is nested in and shaped by the syndicate/department, school and wider policy context. The recent shift to a situated distributed view of learning (student and teacher) has led to an appreciation of the complex synergy between these factors when ICT integration is in contention (Lim, 2002; Zhao & Frank, 2003). It is not sufficient to consider professional development, leadership and school organizational systems, available ICT infrastructure, resources and support, and teacher confidence and expertise in isolation. A systems approach is needed (Selwyn, 1999). These factors in combination support and sustain, and/or inhibit teacher the integration of ICTs into teachers' professional lives. Individually and in combination they are manifest as enablers and constraints in different stages in teacher, department and school integration of the use of ICT. Each stage of use and integration brings with it, and demands, different teacher knowledge and expertise and supporting conditions.

The Issue of ICT Provision

The provision of ICTs to schools is complex and multifaceted due in no small part to the interweaving of the financial, knowledge/ expertise and organization/ management issues implicated in the acquisition and operationalization of ICTs in the school setting. The cost of ICTs continually threatens equity in the availability and use of technological resources along socio-economic and geographical lines. Schools in lower socio-economic regions are more likely to struggle to meet the substantial, and sustained, financial commitment involved in ICT provision and support. The development of new ICT technologies means that the issue of provision can never be fully or permanently resolved. More powerful, mobile and flexible technologies with different affordances are constantly being developed. Schools and teachers face an ongoing challenge to keep pace with these developments, all the more so because student ICT use is dynamic and continually evolving. Many no longer use email. They have moved to use MySpace, FaceBook and more latterly Bebo. The development and introduction of the interactive whiteboard is a compelling illustration of the ongoing commitment to funding and teacher learning required for the use of ICTs. At a more fundamental level schools in remote and disadvantaged regions may face challenges in accessing teachers with the requisite ICT knowledge and skills along with challenges associated with the infrastructure for ICT use such as their not being connected to power supply grid power and not having access to the Internet or broadband technologies (Leach & Makalima, 2006). All these aspects are of concern given the convergence economic and technological developments inherent in globalization, and the knowledge economy.

Access to ICTs is an issue at all levels of the education system. For many primary and secondary schools, the initial response to the provision of limited numbers of computers has been to set up computer suites as a way of ensuring whole school access to a computer. However, relocating a class to a computer suite disrupts normal classroom routines and ways of working, particularly when, as is typical, computer suites are set up for individual work. The need to book the suite ahead of time runs counter to the genuine integration of ICT into teaching and learning by restricting opportunities to exploit the any time, anywhere access to people, information and lesson materials that ICTs afford (Nash, Dutton, & Peltu, 2004). Mobile pods of laptop computers go some way towards addressing these limitations of access although the pods still need to be booked. In somewhat different example of the implications of limited access, teachers with laptops in New Zealand were not prepared to make a commitment to use electronic resources for teaching and learning until they had reliable ongoing classroom access to a data projector. The time and effort required to access and set up a data projector often exceeded any benefits teachers anticipated, particularly since they envisaged as ideal the flexible use of the laptop plus Internet to respond to student ideas and questions. Colleagues with reliable access used the laptop-plus-data projector as a 'natural thing'. The use of the web/ Internet is increasingly prevalent in tertiary settings with the introduction of blended or fully online delivery of courses. The need for computers and ICT at this level is largely undisputed. At the other end of the spectrum researchers are providing rich examples of how the use of ICTs (computers and digital cameras) by young children can support cognitive and social development in play and in knowledge construction.

Student home access to ICTs is an issue of educational significance. One of the proposed benefits of ICT is that they can blur the school community divide and offer any-time any-place opportunities for learning. Evidence is emerging that ICTs can support home-school links to build relationships and provide added support for student learning (Somekh, Mavers, & Lewin, 2001). Students who make extensive use of computers at home are able to integrate their use of ICT in sophisticated ways (Furlong, Furlong, Facer, & Sutherland, 2000). Home access to computers and the Internet tends to differ along socio-economic lines and so this research draws attention to possible inequities between young people and peers who lack easy access to these technologies.

Conclusion

ICTs already play an important role in society at large. Their use has contributed to the rise of the knowledge society and the attendant knowledge economy. ICT however has proved to be a versatile and dynamic entity. As organizations have integrated the use of ICT they have experienced challenges and changes in their cultural and organizational practices. Schools have also experienced challenges. Given the life experiences and expectations of the current student population and the concern to develop students as lifelong learners the integration of ICTs is an important issue.

The extent to which is ICT use a catalyst or a lever for change (Kerr, 1991) is a question that threads much of the ICT literature. While the rhetoric is that ICTs will transform schools and education the reality is more measured. It seems that while many teachers and schools are making substantial use of computers out of the classroom in ways that have led to efficiencies in administration and management and to increased customization and interactivity in lesson materials most are making less use of ICTs in the classroom for teaching and learning. When used appropriately, ICTs can leverage change. Recent work by Hennessey and colleagues (Hennessey, Deaney, & Ruthven, 2005) provides support for an incremental evolutionary view of ICT integration into classroom teaching. The planned changes leveraged by ICT can be significant and include, for example, increased student autonomy and the development of distributed learning communities. When governments, schools and teachers have a vision for ICT use, it can serve as a communication tool, a access path to resources, and as a forum for collaborative activities that involve teachers, students and the wider community. School and teacher equitable access to technologies and to knowledge/expertise and a vision for ICT integration into teaching and learning are essential if the affordances of ICTs are to be exploited in the service of children's learning.

Biographical Notes

Bronwen Cowie, PhD, is currently Director of the Wilf Malcolm Institute of Educational Research at the University of Waikato, Hamilton New Zealand. She is a former director of the Centre for Science and Technology Education Research at the University of Waikato. Her research expertise is in the areas of assessment for learning in science and technology education, teacher professional development and the role of ICTs in teaching and learning. She is co-director of Laptops for Teacher National Evaluation and the New Zealand Science Learning Hub.

Alister Jones, PhD, is currently Dean of the School of Education at the University of Waikato, Hamilton New Zealand. He is a former Director of the Wilf Malcolm Institute of Educational Research, and former director of the Centre for Science and Technology Education Research at the University of Waikato. He has just completed a 4-year term as a Royal Society of New Zealand Councillor. His research is in science and technology education at the national policy, research and curriculum level. He is co-director of Laptops for Teacher National Evaluation and the New Zealand Science and Biotechnology Learning Hubs.

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EFFECTIVE TEACHING: AN EMERGING SYNTHESIS

Thomas L. Good, Caroline R. H. Wiley, and Ida Rose Florez

Introduction

In this chapter we discuss research on effective teaching. Effective teaching can be defined in many ways including teacher behavior (warmth, civility, clarity), teacher knowledge (of subject matter, of students), teacher beliefs, and so forth. Here we define effective teaching as the ability to improve student achievement as shown by research. As noted, this is but one way to define effectiveness. However, teacher effects on student achievement are the preferred definition of high quality teaching by American policy makers, and those in many other countries as well.

After discussing what is known about how effective teachers teach, we then turn to an examination of one of the many either-or debates about research on teaching. Our discussion focuses upon the strident but self-defeating arguments that student learning is best described by a behavioral or a constructivist conception of learning. We contend that a more powerful explanation of good practice is achieved by combining these two theoretical approaches.

We then present a brief discussion of teaching in Japan and the United States. Many policymakers have argued that American students would learn more if they were taught the way that Japanese students are. We will show that an analysis of normative teaching in Japan corresponds to best practice teaching in the United States.

Then we discuss one new direction in research on effective teaching. Some educational researchers have recently argued the need to understand students as social beings and to explore the relationships between both teachers' instructional support for students as well as their social and emotional support for learners if achievement outcomes are to be understood. However, most research continues without this integration. Thus, we argue that research needs to become more integrative and to assume a more mature and more comprehensive approach to the study of teaching. We argue the need for looking at students both as learners and as social beings.

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Effective Teaching

Research on effective teaching has a rich history as researchers have long struggled to find the Holy Grail and to answer the question: How can teachers promote student achievement? Although a variety of research approaches can be evidenced at any point in time, American educational research has always had a dominant form or research focus during a given era. For example, in the 1950s and early 60s much research focused on teachers' personal characteristics (e.g., creativity, warmth), (see Getzels & Jackson, 1962; Ryans, 1960). In the 1970s and early 80s research focused on what teachers did and how their behavior impacted student learning (see Good & Grouws, 1977). This tradition was soon followed by concern for teacher beliefs (Clark & Peterson, 1986) and over time concern shifted from who teachers were to how they behaved and what they believed. Then much research interest moved to students - what they saw, felt and did (see Rohrkemper, 1985; Weinstein & Middlestadt, 1979). Research then turned to an emphasis on how teachers teach different subject matter (Stodolsky, 1988) and to teachers' knowledge of how to teach subject matter (Shulman, 1987). And most recently research has moved beyond teachers and students to focus upon the learning environment (Blumenfeld, Marx, & Harris, 2006; Mergendoller, Markham, Ravitz, & Larmer, 2006).

The shift from the current research focus to a new research focus occurs because a subset of the research community begins to note and argue about the weaknesses of the current research focus. Progressively these arguments gain support and a research focus (say on teacher behavior) moves to a new concern (teacher beliefs) and so forth. Typically, the new focus largely rejects the past focus and thus becomes different, but not additive (see Good, in press).

Research foci that dim do not disappear as they often resurface decades later in some form. For example, today's conceptions of learning environments can be traced to Dewey's theoretical conceptions of social learning and community. Conceptions of teacher behavior in the 70s are now being reexamined currently in value-added studies of teaching (see Fallon, 2006). Other themes are identifiable in this research on classroom learning and teaching tradition as some have advocated the need for a form of instruction (good teaching is individualized OR small group) and there are eras where a form of research has dominated (quantitative OR qualitative), and as we show in the next section, the insistence in studying learning from only a behavioral or cognitive perspective.

These changing research venues have been seen by some as fads as the new emphasis sometimes sweeps away good practice. For example, a decade ago the National Council of Mathematics Teachers (NCTM) exerted a strong policy influence on practice (because of their perception that normative classroom instruction included too much drill and practice) that resulted in too little review and practice for students to retain concepts, and subsequently NCTM had to modify its position. Part of what appears to be a constantly changing direction in research practice (and its conception of the problems of practice) is the fundamental complexity of life in classrooms. Who teachers are, what they know, what they do, how they structure learning formats and so forth impact learning. Similarly, who students are, what
they know, and what they value and do are critical determinants of what is accomplished in classroom settings.

Thus, the "narrowness" of research at a point in time is not simply a fad or an overdetermined orientation but are also decisions partly imposed because of the complexity of studying so many dimensions at the same time. Perhaps the best explanation for the circular nature of classroom research is some combination of complexity and faddism.

Although understandable to some extent, this rapid and continuous change of research focus is costly because educational research is not additive. Every paradigm generates useful concepts and knowledge, but the new research largely ignores the contributions of earlier research traditions and focus primarily on the weaknesses of the earlier research. For example, when research on teachers moved from a focus on teacher characteristics to a study of what teachers do, the new research was certainly new, but not integrative because it left beyond knowledge of who teachers were.

Some General Aspects of Effective Teaching

Perhaps, the largest finding that comes from this research area is that teachers make a difference in student achievement. Although this claim may seem self-evident at first glance, it is not. In the 1960s & 70s many claimed that school variables (including teachers) had little, if any impact, on student learning and that students' achievement was largely explained by home factors. Since then research has consistently shown that the effects of teachers on student achievement are large and important (see McCaffrey, Lockwood, Koretz, & Hamilton, 2003).

In writing about generic aspects of teaching, we organize our conclusions based on research that specifically relates teaching practices to specific student achievement. The bulk of this type of research has occurred in K-8 classrooms. Much research has been conducted on preschool programs, however, typically the form of this research has focused on the effectiveness of the program, not the teacher. The paucity of research on high school students is largely due to two factors. Foundation and government research funding has targeted the early grades with the rationale that the earlier the intervention the better. Further, high schools have expressed less interest in research participation than teachers in the earlier grades.

However, how and why these effects occur is subject to much debate. Yet, despite the uneven progress in research on teaching, there are several principles that most researchers (whether qualitative or quantitative) would agree represent effective teaching practice. For more information about how these ideas were derived from research see Brophy (2006). For information about what these principals look like in practice and from varying theoretical perspectives see Good and Brophy (2008). General principles of effective teaching follow:

 Appropriate expectations. Teachers need to form accurate and appropriate expectations for student learning. Expectations that are too high or too low lessen student achievement. In addition to stating appropriate expectations for student performance, teachers must work to help students over time to exceed present expectations and help students realize the growth they have made.

- 2. Proactive and supportive classrooms. Students learn best in classrooms where academic and social goals are clear and where caring communities are afforded. Students need to know that wrong answers are no issue if we learn from our errors and misconceptions. Supportive classrooms allow students to take intellectual risks. In supportive classrooms focus is placed on learning, not simply on "knowing" or right and wrong answers.
- 3. *Opportunity to learn*. Classroom learning is best when most available time is used for academic work in which students are highly engaged. Students can not learn material that they do not study or develop skills they do not see or practice. Although this point seems obvious, in too many classrooms students do not get to read original documents, to explain their answers, to challenge the thinking of teachers and peers and so forth. What students are assigned to learn, and their degree of involvement in work are the strongest known predictors of student achievement.
- 4. *Curriculum alignment*. Content is aligned to create a visible and coherent plan for achieving curriculum goals. Teachers carefully differentiate between more and less important content.
- 5. *Coherent content*. Content is organized and explained in sufficient depth to allow student to learn meaningfully.
- 6. Thoughtful discourse. Questions are planned and allowed that involve students in sustained discussion and exploration of key ideas. Thoughtful discourse allows for various opinions to be raised and to explore alternative explanations for historical and contemporary events. Thoughtful discussion goes beyond defining what "is" to explaining why, addressing issues of value, and considering future implications.
- 7. *Scaffolding students' ideas and task involvement*. The teacher actively supports student learning activities and strives to help students understand concepts more fully. In many classrooms, discussions focus mainly on what we know or just found. Just as teacher scaffolding can help students to understand at a higher level, good scaffolding can help students to move from the present to the future "So we know what we found in the experiment, how can we use this information?"
- 8. Practice/application. Students need ample opportunity to apply and practice new learning. Distributed practice with concepts in diverse contexts enhances long-term retention of learning. Critics of current teaching methods often scorn the fact that teaching in schools, at best, prepares students for acts of "near transfer." That is, students can use extant knowledge to solve problems that are similar to what they have studied. However, when problem appearances change, students can not solve the problems, even though they have the prerequisite knowledge to do so. Students need much practice to learn concepts. They also need ample opportunity to learn to practice concepts once firmly acquired in new contexts.
- 9. Goal-oriented assessments. Test, quizzes, and papers need to focus on important curriculum goals. Such assessments help students to focus upon important content and allow them to practice applying important information. Oddly, teachers sometimes believe that preparing students for the test is unfair or wrong. Students need to know that their daily activities are important and that they serve as advance organizers for showing what knowledge teachers think is important and how students can best display that knowledge.

Effective Teaching Across Different Grade Levels

The nine principles of effective teaching outlined above pertain to all grades. However, the ways in which each principle is applied, the relative importance, and the potential impact of each often varies for students of different ages. For example, proactive and supportive classrooms are beneficial to both kindergarteners and high school seniors. But the lack of a supportive classroom environment in kindergarten may have more detrimental effects than in higher grades. Young children are just establishing their relationship with school as a social institution, and how they view themselves as learners. An unsupportive environment may significantly undermine five-year-olds' developing self-concept, whereas older students have more mature coping skills and, hopefully, a more solidified self-concept. In addition to the initial entry to schooling, the relative importance of a proactive and supportive classroom is also higher for transition periods such as the first year of middle school or high school, or when children move to new schools. Even though students are older, transitioning to a new school, new social structures and (when moving up to middle or high school) more rigorous cognitive demands means students are particularly vulnerable and benefit from clear expectations and readily available support to help them meet expectations.

In another example, *thoughtful discourse* is an essential component of effective teaching for all students, but the discourse is different at different grade levels. In early childhood and primary classrooms, teachers often scaffold correct grammatical sentence structures and help children elaborate ideas. For example, if a preschooler says, "The truck runned over my toe." The teacher may respond, "I see that the truck ran over your toe. How did that feel?" In the upper elementary and middle school years, effective classroom discourse requires teachers to gradually turn over responsibility for thinking and the structuring of ideas to the learner. If a sixth-grade student, for example, says, "I don't understand how to divide these fractions" a teacher may respond, "Ask me a question that will help you understand." In high school, thoughtful discourse includes respectful consideration of a variety of ideas and perspectives. Effective teaching includes questions that provoke debate and allow for discussions of controversial issues which challenge students to authentically consider ideas that differ from their own.

Practice and application also looks different and has varying relative importance at different grade levels. In the early grades, children develop essential cognitive processes (like the ability to intentionally focus their attention or intentionally remember something), foundational academic skills, and the routines of school life. These skills are critical to school success. Yet at the time they are developing these skills both the capacity of their attention span and the fluency of their recall is limited. Thus, younger children need considerably more repetitions and more frequent opportunity to practice than older students. In the older grades, students need less practice on material that draws on mastered skill, but still need increased opportunity for practice when they encounter new information or skills that either draw on prerequisite skills or knowledge that they have not previously learned, or that needs refreshing or refinement.

Learning Transcends a Single Paradigm

To understand complex phenomena, such as effective teaching, ideas are typically decomposed to simpler, more easily defined constructs (often conceptualized as a dichotomy.) Classroom experiences are defined as teaching OR learning, academic OR social, developmentally appropriate OR inappropriate. Since categorization is a primary way we define concepts, dichotomies make complex concepts and experiences easier to understand and to communicate with others (Bredekamp & Copple, 1997). When a teacher says she is concerned about a child's academic progress, but not social or emotional adjustment, a listener can more easily understand the teacher's concern.

However, dichotomies have their limitations (Good & Brophy, 2008; Gutierrez & Rogoff, 2003). The simplicity that makes dichotomies understandable is brought about by ignoring fine, but often essential, nuances. A teacher, who has only academic concerns, may overlook subtle signs that the child is struggling emotionally. Such undetected emotional difficulties may exacerbate or even cause academic problems. As in most complex situations it would be impossible to determine which came first and to ignore either would be counterproductive.

Many dichotomies are used to define classroom practice, and in varying degrees, facilitate the understanding and communication of complex phenomena. Unfortunately, such dichotomizing often ignores essential nuances of effective teaching and, even worse, casts important ideas about teaching as contradictions. To understand effective teaching, at some point, competing theoretical explanations must be reconciled. Perhaps one of the most divisive educational dichotomies is the controversy between transmissive (didactic, traditional, behavioral) and constructivist instructional methods. Though some researchers and theorists embrace a balanced view (Good & Brophy, 2008), many argue that either constructivist (Mergendoller et al., 2006) or "behavioral" (Skinner, 1984) methodology is superior and should be considered the gold standard of effective teaching.

The behavioral approach to education places a heavy emphasis on the child's interaction with the environment and assesses changes in behavior (both social and academic) to determine progress (Cooper, Heron, & Heward, 1987). Antecedents and consequences (reinforcers and punishers) are analyzed and manipulated to increase desired behavior. While contemporary cognitive-behavioral approaches incorporate internal (cognitive and emotive) events into the theory, traditional behaviorism is strictly concerned with overt behavior (Skinner, 1984). Unfortunately, some teachers misunderstand behaviorism's emphasis on overt behavior as an implication that behaviorists see children as passive learners waiting for someone (the teacher) to do something to them (Mergendoller, et al., 2006). However, both traditional behaviorism and cognitive-behavioral approaches see children and the adults in their environment as engaged in dynamic, complex, reciprocal interactions in which the child and adult are both agents of their own behavior and deliverers of reinforcers and consequences for others' behavior (Cooper et al., 1987).

In constructivist theory, children are seen as curious learners who actively explore their environment, constructing knowledge based on their experiences (Gagnon & Collay, 2006; Good & Brophy, 2008; Mergendoller et al., 2006). Constructivists emphasize the importance of allowing the child to act as an active agent in his or her own learning. From a strict constructivist point of view, teachers do not teach, they facilitate (Gagnon & Collay, 2006; Mergendoller et al., 2006).

Thus, unlike Piaget's constructivism (Piaget, 1961), which describes how *children* acquire knowledge, contemporary constructivism is often used to categorize the *teacher's* behavior (Robinson, 2006). Constructivists argue that some methods facilitate knowledge construction and other methods (primarily textbook reading, lecture, rote drill and memorization) do not. However, as Robinson (2006) points out, acquiring and retaining new information is essential to constructing knowledge.

Effective teaching requires expertise in both behavioral and constructivist approaches. First, effective teaching requires the flexible implementation of a variety of methods depending on the instructional goal and the needs of the students. Good and Brophy (2008) have argued that any teaching method is useful in certain situations and that no one method is optimal for all purposes. Secondly, behavioral and constructivist theories complement each other. Maximizing the opportunities for children to construct knowledge requires careful attention to the antecedents and consequences in the general learning environment, in student-teacher interactions, and within curricula and instructional strategies. Children, as curious, active learners, are significantly reinforced when they construct and retain new knowledge which increases the likelihood they will remain actively engaged in their education.

Finally, behaviorism and constructivism accurately describe unique and essential aspects of the learning process. An accurate understanding and a skillful implementation of each is necessary to maximize students' academic achievement. Ignoring the presence of behavioral dynamics or children's construction of knowledge does not make those phenomena go away. Instead such ignoring prevents teachers from developing the well-rounded skills they need to implement effective teaching practices.

As evidence that neither a behavioral or constructivist approach alone defines effective teaching, the general principles of effective teaching outlined above are not related to one particular method or another. Each principle provides a broad construct which can inform classroom teaching regardless of subject or grade. Often, however, the best implementation of these principles involves a combination of methods. For example, determining appropriate expectations for literacy instruction in the primary grades necessitates both an accurate determination of children's sight word acquisition and their progress using newly acquired sight words in their own writing. Curriculum Based Assessment for Instructional Design (CBA:ID; Gickling & Havertape, 1981; Gickling & Rosenfield, 1995) is a well-established behavioral approach that quickly and accurately determines children's sight-word acquisition. Child-produced pictures and stories, a "whole-language" constructivist activity, are an excellent way to determine a child's generalized use of newly acquired sight-words. Each method is valid. Each helps teachers establish appropriate literacy expectations. Using both in tandem gives teachers a more complete picture of children's skills than each used separately.

Effective teaching also draws on both behavioral and constructivist approaches to create proactive and supportive classrooms. Creating effective learning environments

requires careful attention to such antecedents as furniture size, room arrangement, orderliness and routine, lesson pacing and structure, and teacher affect (Blumenfeld et al., 2006; Cooper et al., 1987; Mergendoller et al., 2006; Skinner, 1984). Thoughtful implementation of learning activities that piques children's curiosity creates an engaging environment children enjoy (Blumenfeld et al., 2006; Mergendoller et al., 2006). Skillful arrangement of naturally occurring and, when necessary, artificial reinforcers (such as prizes, stickers or treats) draws students to learning tasks that some students may find uninteresting (Skinner, 1984).

Scaffolding is a final example of how effective teaching often involves a combination of behavioral and constructivist approaches. Scaffolding, introduced by Lev Vygotsky (Karpov & Haywood, 1998), who embraced both behavioral and constructivist approaches, describes a process of teaching new skills or knowledge in which the learner gradually assumes more responsibility for performing the task or demonstrating new knowledge.

Subject matter, topic, curricula and student variables all affect the optimal use of didactic and constructivist approaches for various stages of scaffolding. Different methods are more appropriate for different stages in the scaffolding process. For example, when introducing double-digit regrouping, a teacher may use math manipulatives to demonstrate regrouping (a whole-class, didactic activity). She may then allow children to explore the relationship between ones and tens, using manipulatives (a more constructivist approach), while circulating throughout the class, engaging small groups of students in dialog, affirming their discoveries and correcting any misunderstandings. She may then wrap up the lesson by demonstrating the relationship between the manipulatives and written arithmetic problems. As students become more proficient, they may begin independent practice with written double-digit problems.

Effective scaffolding involves the thoughtful orchestration of a variety of behavioral and constructivist strategies that provide greater levels of support for novices and decreasing assistance as students are able to demonstrate independence. Although some constructivist approaches, such as discovery learning, argue for purely exploratory introductory activities, discovery can be time consuming, cumbersome, and problematic. In the initial stages, novices, who have little knowledge, require a more didactic approach until they have acquired a workable knowledge base. Novices need a basic pool of knowledge in order to interact effectively within a domain. Schwartz and Branford (1998), for example, documented the benefits of lecture and textbook readings especially when students bring different initial levels of knowledge to a particular topic.

From these examples we have hoped to show that effective teaching strategies are not linked to any particular methodology or conception of learning and that, in most cases, effective teaching requires the flexible use of many strategies informed by a variety of theoretical constructs. Now we explore effective teaching in a comparative way.

International Comparisons of Effective Teaching

Are there universal normative teaching practices that occur across cultures, or globally? If so, is teaching more effective in some countries than others? Much has been made of international comparisons of student achievement. Research suggests that although there is much variation within countries (see Givvin, Hiebert, Jacobs, Hollingsorth, & Gallimore, 2005), national patterns of teaching do exist and to a lesser extent, global patterns, at least in math and science lessons. Givvin et al. (2005) looked for national and global convergence in math lessons in three dimensions: purpose (review of old content, introduction of new content, practice current content), classroom interaction (public or private), content activity (single or multiple problems), and non-problem (lecture).

Overall, across all three dimensions, national teaching patterns are more evident, or stronger, than global teaching patterns, especially in Japan and the United States. Switzerland and Australia had the lowest convergence rates indicating that a national teaching pattern is not as strongly evident in those countries. However, when each dimension is examined separately, a different picture exists. There is much variability in the strength of national patterns in the purpose dimension across countries. Japan by far is the strongest and many of the lessons observed in Japan had similar occurrences of teaching behavior (reviewing old content, introducing new content, and practicing current content at generally the same point in time of the lesson). The classroom activity dimension had the least variability across countries, indicating that all countries within themselves exhibited similar teaching behaviors.

Japan was the only country that displayed high levels of convergence on all three dimensions. Japanese lessons tended to start off with a short review and the majority of the lesson was introduction to new content. Japanese teachers tended to review for a shorter amount of time than teachers of other countries. Practice was usually given at the end. It was mostly public interaction, with private work mixed in throughout the lessons. Much of the lessons were single problems at a time versus a problem set or multiple problems and usually concluded with non-problem oriented discussions. These instructional practices at a structural level do not vary as much from those patterns of effective teaching that Good and Grouws (1977) described in American classrooms, or in treatment studies trying to make mathematics instruction more meaningful (Good & Grouws, 1979). However, work in Japan suggests a more active role for students in learning than in earlier work in American classrooms. The blending of these teaching approaches offers instructional power and flexibility.

Similar Japanese teaching patterns were found by Stigler and Hiebert (1999): A brief review of old content, presentation of the problem for the lesson, a systematic process of individual work followed by group work, and discussion and summarization of the problem. Japanese lessons tend to include (Lewis & Tsuchida, 1998; Stevenson & Stigler, 1992; Stigler & Hiebert, 1999):

- · Developed or elaborated concepts
- High content coherence (that is few outside interruptions, inclusion of few topics as opposed to many topics within a lesson)
- · Scaffolding and structured problem solving
- Student presentation of alternative methods of solving a problem
- Teacher use of students' answers in discussions and generating ideas
- Equal amounts of student work spent on practicing routine procedures/rules and analyzing or creating new problems in different ways

• National curriculum with in-depth descriptions of each objective, along with detailed schedules of the number of hours to be spent on each (at least in elementary school)

Although, analytically these seven factors have considerable overlap with the nine principals coming from work in American classrooms, in comparative studies where both Japanese and American classrooms are examined, these principles occur to a lesser extent in American classrooms than in Japanese classrooms.

It is important to note that the previous patterns in Japanese teaching are not linked to student achievement per se, rather are comparative descriptions of teaching practices. It can be inferred that these teaching practices are related to achievement by noting Japan's high ranking on various international achievement tests [Programme for International Student Assessment (PISA), 2007; Trends in International Mathematics and Science Study, 2007].

It is also important to note that less research has been conducted on Japanese teaching practices of language arts/reading than in mathematics. It is unknown if similar lesson structure and teaching practices would occur in subjects other than math and science. Japan did not participate in the Progress in International Reading Literacy Study (2007), but ranked 8th out of 31 countries in the reading section of the PISA (2007).

Students (and Teachers) as Social and Emotional Beings

As noted previously, the key finding of effective teaching research is that teachers make a difference in student achievement. The relationship between instructional opportunity, social support and academic outcomes has been documented in earlier research (Ebmeier & Good, 1979), but this connection has been largely overlooked in most effective teaching research, leaving social and emotional considerations to more clinically oriented investigators. For example, motivational researchers have documented a vital relationship between affective aspects of the educational process and achievement (Dweck, 1986, 1989; Murphy & Alexander, 2000; Sinatra, 2005). How teachers and students co-regulate motivation (McCaslin et al., 2006), the degree to which students believe they are capable of learning (Zimmerman, Bandura, & Martinez, 1992), the degree to which teachers believe they are capable of teaching (Rimm-Kaufman & Sawyer, 2004), how students perceive high-stakes testing (McCaslin, 2006), and how students cope with failure and success (Rohrkemper & Corno, 1988) have all been linked to educational performance. Unfortunately, very little research on effective teaching (as we have defined it in this paper) has studied affective dynamics in actual classrooms. Since teaching is a socially dynamic, psychologically complex endeavor (Pianta, 2005) a successful quest to identify the essential components of effective teaching must incorporate and explain the social and emotional dynamics of classroom experience.

One example of recent research examining classroom affective dynamics studied how teacher emotional support affects the achievement of lower-performing, at-risk students. Hamre and Pianta (2005), using direct classroom observation of teacher practices, found that at-risk children in first-grade classes with low to moderate levels of teacher emotional support performed significantly worse than children not considered at-risk. However, at-risk first graders who received high levels of teacher emotional support matched their non-at-risk peers on an assessment of end-of-theyear achievement (Hamre & Pianta, 2005).

These findings not only demonstrate that teacher-student social dynamics affect academic outcomes; they suggest emotional support is arguably most important for at-risk students and that such support can significantly impact these students' academic achievement. Further, Hamre and Pianta's (2005) findings also suggest that while there are widely-accepted principles that broadly define effective teaching, these principles impact student achievement to varying degrees depending on a variety of factors, not the least of which are student social and emotional factors. These insights on the needs for social support and instructional direction have been further investigated in the research of Connor, Morrisson, and Petrella (2004). This line of reasoning lends itself to a plethora of important and yet unanswered questions: In what ways do social and emotional factors impact how children experience and benefit from thoughtful discourse? How do affective characteristics mediate children's motivation in light of teacher expectations? What is the relationship between social and emotional characteristics and student engagement in opportunities to learn? How do children experience emotional support? How can teachers know what kinds of support children need?

Conclusion

Research on effective teaching is by no means scarce. Decades of research has given the field many theories and practices as to what makes teaching lead to better student achievement. Yet despite the volume of research, only a handful of general teaching principles have emerged. The paradigms that have emerged have been largely independent of one another, where instead of one paradigm acting as a foundation for building the next, the paradigms seem to lay aside one another acting as one larger foundation for which something is to be built.

Research on teaching needs to become more integrative where theories build off one another synthesizing into subsequent stronger theories. Research questions need not ask, which is better – behaviorism or constructivism, individual work or small group, focus on teachers or on students, randomized field trials or descriptive studies? But, rather ought to ask, how are these things related? Under what circumstances is one theory more fitting than another? This current lack of synthesis and focus on either-or debates only hinders scientific progress and is detrimental to the field as a whole. These questions, and others, will find the best answers as either-or debates yield to a maturing synthesis that integrates previous and current research on effective teaching. We reiterate our belief that research on teachers and students' learning must respect that students are both academic learners and social beings. Developing a better understanding of how affective dynamics (social and emotional support) influence student achievement and how these may or may not interact with known indicators of effective teaching can offer educators more useful methods and theories to apply in their classrooms. Not only do we advocate for a synthesis of theories, but also to take into consideration developmental age and student and teacher characteristics in theoretical applications. Whereas using the current either-or debate approach to improving student learning assumes a "one-size fit all" application, an integrative approach acknowledges that both students and teachers come in various sizes and styles. By focusing on specific integration, rather than generalization, better or more suitable practices may surface given certain populations of students – some practices may be more effective in some settings rather than others.

Biographical Notes

Thomas L. Good (Tom) is professor and head of the Department of Educational Psychology at the University of Arizona. Previously he has been a faculty member at the University of Texas and the University of Missouri. He has long served as the editor of *The Elementary School Journal* and is the author of *Looking in Classrooms* (with Jere Brophy), which is now in its 10th edition. His policy interests include youth policy and charter schools. His current research interest is focused on understanding and improving schools that children from low-income homes attend. Relevant to this end, he is now working on a special issue (with Mary McCaslin and several colleagues in EDP) that reports on school reform of low-income schools in one state.

Caroline R.H. Wiley is an educational psychology Ph.D. student at the University of Arizona, with a minor in psychology (focus on program evaluation). Her current research interest is focused on classroom assessment and grading practices. Other interests may be characterized as classroom research, comparative research, and educational evaluation within the context of educational policy. In addition to teaching classroom assessment to preservice teachers, she has served as a data analyst for various research projects, including ones sponsored by the Carnegie Foundation and the Office of Educational Research and Improvement.

Ida Rose Florez, M.S., N.C.S.P., is a graduate associate at the University of Arizona where she teaches undergraduate child development and educational measurement courses in the department of educational psychology. She earned a masters degree and completed requirements for advance graduate certification in school psychology at Millersville University in Millersville, Pennsylvania. Ms. Florez has led preschool special education assessment teams in three states and served as clinical faculty with Penn State University's College of Medicine on the pediatric rehabilitation and child psychiatric units at the Hershey Medical Center. She currently conducts research in the areas of early childhood teacher preparation and early childhood assessment.

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TEACHING AND NONVERBAL BEHAVIOR IN THE CLASSROOM

Elisha Babad

Introduction

What do teachers need to know about nonverbal (NV) behavior and how can they make use of this knowledge in their classrooms? These are the questions guiding this chapter. Central topics and issues in the psychology of nonverbal communication are presented first, followed by a discussion of NV behavior in teacher–student interaction in the classroom. The latter presentation is divided in two parts – one discussing *students* 'NV behavior (with teachers as detectors), the other focusing on *teachers* 'NV behavior (with students as detectors). The discussion of teachers' NV behavior further distinguishes between "positive" and "negative" phenomena in terms of their effects on students.

The Psychology of NV Behavior As a Research Domain

Human communication integrates verbal and nonverbal dimensions. "NV behavior" includes all expressive aspects that have no verbal content, words, or spoken and/or written language. It includes visual and auditory aspects – facial expressions, gestures, body language, postures, movement, voice and vocal clues (without verbal content), attire, physical appearance, and also behavioral patterns in interpersonal interaction (e.g., personal space, touching, etc.) and characteristics of the setting and the environment.

We live in the era of the visual and of the NV through our continuous exposure to television and movies. From a young age children learn to understand "NV language," to decipher implicit codes and to make meaning of social situations from numerous, often very subtle NV nuances. We learn to understand social situations without having to receive verbal explanation, and NV behavior is a rich source of information, whereas verbal behavior can be misleading and deceptive. A case in point is the extremely popular internet chat, which has been exclusively based on written verbal exchanges (until the introduction of full picture chat). A special "NV language" – in the form of a library of NV icons to express emotional states – had to

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be invented and added to the software to enable the chatters to add NV clues to their verbal interaction.

DePaulo (1992) described the special significance of NV behavior in several aspects: Its irrepressible nature, its links to emotion, its accessibility to observers, its speed, and the fact that it communicates unique meanings. The most important point is that NV behavior expresses and reflects emotional states (Ekman & Friesen, 1969a). The study of human emotions involves most centrally the analysis of facial expressions (Ekman & Friesen, 1978). Emotions sometime "leak" despite people's conscious efforts to avoid displaying them (Ekman & Friesen, 1969b; Zuckerman, DePaulo, & Rosenthal, 1986). People believe (with good reason) that NV behavior is more truthful and less susceptible to intentional lying. The expression "look me straight in the eyes" expresses the belief that attending to NV clues can help prevent concealment or deception. As will be demonstrated later, people (especially students!) have an uncanny ability to decipher NV clues and to derive important social information about other people (especially their teachers) even from the briefest and most subtle NV nuances.

DePaulo and Friedman (1998) summarized the central research topics in contemporary NV psychology. The topics include person perception and personality judgments based on NV sensitivity; NV aspects in self-presentation; the study of deception and detection of lying; social influence and attempts to manipulate impressions; NV aspects involved in interpersonal interaction; NV aspects involved in interpersonal attraction; and the communication of expectations (by judges, doctors, and of course teachers). Studies on media bias and teachers' bias expressed in NV behavior have also been published in recent years (Babad, 2005c; Babad, Bernieri, & Rosenthal, 1989b). In an applied perspective, numerous "image consultants" coach interested clients in NV behavior to improve their public image.

NV Behavior in the Classroom

The classroom is the arena of continuous interaction between teachers and students. The teacher's role is to facilitate students' advancement and achievement in all domains (academic, social, emotional). The responsibility of the teacher for students' overall development is greater in the lower grades, narrowing down in higher grades and in higher education to a more exclusive "academic" responsibility. Presumably, students and teachers share the educational goals and would act in unison to attain them, but the realities and psychological complexities of the classroom refute this idyllic image. The classroom is most often an arena of constant struggle, students and teachers have cross purposes, and classroom management is very demanding and often a costly process. Teachers have the formal authority and all presumable power is in their hands, but students are not necessarily helpless in their constant struggle with teachers, and they can make life difficult and miserable for the teachers.

Like any other hierarchical human system, a variety of strong emotions – positive and negative – are experienced and expressed in the classroom, within each student, between students, in the student group as a whole, and in teacher–student interaction. Much of

this emotional flow is expressed via NV channels, with or without conscious awareness of the students or the teacher. Greater NV sensitivity and decoding ability would provide teachers with a deeper understanding of the emotional undercurrents in the classroom and enable them to be more effective in running the class smoothly.

The central objectives of schooling are cognitive development and scholastic achievement, and as far as academic learning is concerned, it is the *verbal* domain that is most significant in education. Curriculum, didactics, thinking, cognitive processing, reading and writing are all enacted through the use of language and verbal processes. In that sense, the role of the NV in education is secondary. But the NV is the critical factor in the *delivery* of teaching, mediating teachers' success in attaining the primary goals of education. Bad teachers most often fail in their NV delivery, whereas excellence in teaching is always characterized by teachers' positive expressive style.

Students' NV Behavior – Teachers As Detectors

Teachers' NV sensitivity and their ability to decode NV clues in students' behavior are discussed first, separating between learning-related processes and classroom management.

Learning-Related NV Behavior

Effective teachers (see later discussion) maintain eye contact with their students and are attuned to them. Students' NV behavior provides teachers with ongoing feedback, if they can detect it and interpret it correctly. Much of the actual teaching is conducted through teacher-student interaction - either the teacher guides, leads or asks and students respond, or students act or ask and the teacher responds. To make good progress the teacher needs clues indicating students' level of understanding. Because students (especially mediocre or weak students) hate to admit when they do not understand, the teacher needs their NV behavior to provide the necessary clues. Sensitive teachers detect lack of understanding even when certain students claim to have indeed understood. Students' NV behavior also provides the teacher with information about their level of motivation and their attention at any given moment. Teachers' interventions can become more effective when they have possession of such knowledge from the implicit sources. Much as students need subtle clues from the teachers to know how smart they are (see Weinstein, 2002), teachers need NV clues from the students to calibrate their teaching activities. Because the teacher interacts with many students all the time, their NV behavior provides the teacher with differential clues to indicate where different students are at a given time, and who needs what at any point. In this way teachers can identify the students who need particular help.

Teachers NV sensitivity and detection ability helps them to obtain important feedback from students' NV behavior in the social domain as well. Classroom climate and students' moods can be detected from NV nuances, and underlying tension can sound the alarm in real time for investigation and (hopefully preventive) remedy.

Teachers As Lie Detectors

Classroom life involves many hidden and implicit emotional aspects that are never expressed explicitly in words. These might include anger, insults, jealousy and competition on the negative side, and certain hidden positive emotions as well. But a central hidden aspect which can directly influence classroom management is lying behavior. From a psychological standpoint, the classroom represents a confrontational setting, teachers and students often working at cross purposes. The teacher's role as a disciplinarian creates frequent encounters where students hide the truth and lie (about conflicts and quarrels, about assignments and attendance, about cheating in exams, etc.). Teacher's ability to detect lies is an important asset, and insensitive teachers are at a disadvantage in their encounters with students.

Lie detection is a central topic in NV research (DePaulo, 1994; Ekman, 1985, 1989; Frank, 2005). The conception of "leakage" deals with lie detection through separation of NV channels. The theoretical assumption is that people do not control all channels to the same extent, and therefore when they lie, they will be more convincing in the channels they can control well, but they will "leak" the concealed emotion in the channels they control less well. A comparison between channels will indicate a discrepancy when people lie. Let's assume that one wants to conceal anger or boredom, transmitting instead a false sense of friendliness or of alert interest. The best controlled channel is the verbal channel, and therefore words expressing friendliness or interest might be quite convincing and the lie would not be detected. [I always tell my students that if they wish to lie successfully, they should convey their message by writing a letter!] The next channel in the leakage hierarchy is the face. We cannot fully control our eyes and facial expressions, and therefore the face leaks more than the verbal channel ("poker face" represents the relatively strong control when lying; whereas "look me in the eye" represents the potential leakage of the lie in the face). Body language and gestures are less controllable and leakier than the face, and the tone of voice (without attending to words and verbal content) is very leaky. Thus, if we listen to the voice but ignore the words or if we look at the body, we stand a good chance of detecting lying. The leakage phenomenon is well established in research (Ekman & Friesen, 1969b; Rosenthal & DePaulo, 1979), including a study on the leakage of teachers' anger in the classroom (Babad, Bernieri, & Rosenthal, 1989a).

Lying can be detected in other ways, although the process is quite complex. "Scientists studying deception over the past century have noted one thing – that, unlike the fictional Pinocchio, whose nose grew in response to telling a lie, there is no specific verbal or nonverbal deception clue that appears in people in all situations to indicate deception" (Frank, 2005, p. 342). However, DePaulo, Lindsay, Malone, Muhlenbruck, and Cooper (2003) have concluded that some clues can predict deception quite reliably, because liars appear to be less forthcoming, their accounts are less compelling, they appear to be more tense, and their accounts are a bit too polished or exaggerated. Zuckerman et al. (1986) emphasized two decades ago the exaggeration which accompanies lying behavior.

In any case, teachers are required to make a special effort to attend to NV clues to deception. They usually "study" each individual student carefully and can eventually

know the particular clues that characterize her/his idiosyncratic NV style. Teachers who can create among their students the image that they know everything and cannot be manipulated, enjoy a great advantage in classroom management.

Teachers' NV Behavior – Students As Detectors

Students spend a sizable proportion of their "lives" in the classroom. The setting is coercive rather than democratic, numerous demands are made, and they are really dependent on the figure in authority – the teacher. It would be extremely beneficial for them to learn to understand their teachers deeply, to become "experts," able to decipher the most subtle nuances of teacher's behavior (see Babad, 2005b). Because many messages are not stated verbally and explicitly, students become "experts" in understanding teachers' NV behavior. Next, two topics involving teachers' NV behavior are presented, one dealing with positive impact of teachers' behavior in the classroom.

Positive Impact of Teachers' NV Behavior: Teacher Immediacy and Enthusiasm

What are the factors accounting for teachers' success in enhancing students' morale and satisfaction, in leading them to learning and achievement, and in gaining their positive evaluations? The behavioral question is, what do teachers actually *do* to gain teaching effectiveness? Two independent lines of research reached a similar conclusion, namely that teachers' positive expressive NV behavior is the main contributor to teaching effectiveness. The accumulated studies on teacher enthusiasm in Canada (Murray, 1983; Wood, 1999) and on teachers' nonverbal immediacy (NVI) in the USA (McCroskey & Richmond, 1992) confirmed an almost identical list of effective teacher behaviors, almost all of them NV: Gestures when talking to the class; Uses monotone/dull voice (a reversed item); Looks at the students; Smiles at the class; Has a tense body position (reversed); Moves around the classroom; Looks at board or notes (reversed); Has a relaxed body position; Smiles at individual students; Uses a variety of vocal expressions.

Two recent meta-analyses summarized the numerous studies (81 studies in Witt, Wheeless, & Allen's, 2004, analysis; and 37 studies in Harris & Rosenthal's, 2005, analysis) on teachers' NVI and enthusiasm and its relations to educational outcomes. Most studies were conducted in college, but the results of the few high school studies were compatible with the college results. Both meta-analyses showed that teachers' NVI was strongly related to many positive student outcomes: Liking for the course and the instructor, willingness to take more classes with the instructor and more classes on that subject, and students' perceptions that they have learned a lot in the class. What was not clear in those analyses was the degree to which these positive outcomes were translated into objective gains in actual, empirically-measured student achievement. Without going into a host of methodological reservations about these studies (Babad, 2005a, 2007), it can be concluded with confidence that teaching effectiveness,

as perceived and judged by students in college and in high school, is a function of teachers' positive and warm expressive NV style in the classroom.

In those studies, teachers' NV classroom behaviors were not measured directly. Instead, their students rated their behaviors from their retrospective memory, and then proceeded to judge teaching effectiveness and their self-reported learning. The measurement is more strict and empirical in "thin slices NV research" (Ambady, Bernieri, & Richeson, 2000; Ambady & Rosenthal, 1993): Extremely brief video clips of teachers' NV behaviors, 6–10 s long and without comprehension of verbal content, are rated by judges who had never been exposed to the videotaped teacher. Their ratings are then correlated with students' educational outcomes and evaluations of the teachers. In two such studies conducted in college (Ambady & Rosenthal, 1993; Babad, Avni-Babad, & Rosenthal, 2004) it was found that strangers' judgments of thin slices of teachers' NV behavior while lecturing, significantly predicted the end-of-course evaluations the teachers received from their students. It is quite impressive that strangers' impressions of 10 s of teachers' NV behavior, without any comprehension of verbal content, can reliably predict teaching effectiveness.

Microanalysis of the specific molecular elements contributing to this prediction (Babad et al., 2004), revealed that highly-rated lecturers are very expressive in their faces, hands, voices, and body orientation toward their audience. They make continuous shifts in the various channels of their NV behavior, thereby preventing boredom and increasing student interest. And yet, despite their high level of activity, they are quite relaxed and avoid showing negative behaviors.

These findings characterized college teaching, but a parallel study on the predictive power of judgments of thin slices of teachers' NV behavior in high school showed a different pattern of results (Babad, Avni-Babad, & Rosenthal, 2003). In the high school study, teachers were videotaped in several instructional situations, and the most positive prediction of students' evaluations of their teachers was not found for lecturing behavior, but rather for clips videotaped while the teachers were involved in disciplinary behavior. The more teachers' NV behavior while disciplining students for 10 s was judged positively by the stranger judges, the more those teachers received positive evaluations from their classroom high school students at the end of the year. It seems that in the more tense atmosphere of the high school, the warmth and NV expressiveness of the teachers is more important in disciplinary situations than in frontal lecturing.

Negative Impact of Teachers' NV Behavior: Teachers' Differential Classroom Behavior

Most of the research discussed in the previous section was conducted in higher education, although results are applicable to high school as well. The following discussion is based on research conducted in elementary and high school, and its results are probably less applicable to the university level. Here, teachers' NV behavior is connected to the domain dealing with teacher expectancies, teachers' self-fulfilling prophecies, and teachers' differential behavior in the classroom.

"Pygmalion in the Classroom" and Teacher Expectancies

In the famous "Pygmalion" study, Rosenthal and Jacobson (1968) named certain students and told teachers that these students (who were actually selected at random) were diagnosed as "late bloomers" who are expected to show great academic improvement. And indeed some of these children did demonstrate leaps in IQ over the year, all as a causal result of teacher expectancy or "prophecy." The Pygmalion study evoked a great controversy and a multitude of expectancy studies. Eventually, the notion that teacher expectancies might act as self-fulfilling prophecies and influence student performance was accepted. The area was widened over the years to include naturally occurring teacher expectancies for high- and low-achievers with no fabricated manipulation of "blooming potential," reflecting educational concern about teachers' conduct in heterogeneous classrooms. Studies focused mostly on teacher expectations of high- and low-achievers within the same classroom (but also on differential expectations related to gender differences, ethnic group differences, children with disabilities, etc.). The educational concern was not focused on potential blooming due to positive expectancies, but rather to potential damage that might be caused by teachers to children at the bottom of the scale.

Teachers' Differential Behavior (TDB)

For teacher expectancies to influence students' performance, they must be behaviorally transmitted to the students and be absorbed by them. Numerous investigators collected data on teachers' differential behavior toward low- and high-achievers, and the evidence on substantial lists of differential behaviors was compelling (see Brophy, 1985; Harris & Rosenthal, 1985).

Several conclusions had crystallized over the years from the accumulation of studies: (a) Despite the strong statistical effects, TDB is not a vulgar or a highly visible phenomenon, and the differential behaviors are quite subtle and often almost invisible. (b) Teachers try to hide their differential behavior and control it, and therefore behaviors that are more easily controllable (such as verbal feedback to students) showed a trend of becoming more equitable and less differential over the years. (c) The simplistic notion that high-achievers are the recipients of all "goodies" was refuted, as it became evident that teachers often give more legitimate learning support to low-achievers, reversing the pattern of differentiality. The problem remained acute with regard to teacher behaviors in the affective domain, with high-achievers receiving more warmth, love, smiles, eye contact, and generally more positive emotional support (Babad, 1998). (d) Some teachers demonstrate a lot more TDB than others, and at the other end of the distribution some teachers are indeed fair and equitable. Interestingly, the more biased teachers are more prone to perceive themselves as fair and equitable.

TDB in NV Behavior

Because of the subtle nature of TDB and its prevalence especially in the affective domain, researchers started examining TDB in teachers' NV behavior

(see Babad, 1992, 1993). A series of studies examined thin slices of teachers' NV behavior while talking about and talking to a low- or a high-achieving student. In the interaction clips, only the teacher was seen and heard, and the student remained unseen. Judges' ratings of these videotaped clips showed systematic and substantial expectancy effects (i.e., differential behavior toward high- versus low-achiever), especially in the ratings of affective variables. In two studies with the same stimuli, children in fourth grade served as judges, and they were accurate in detecting TDB and guessing when the teachers interacted with each type of student. In a more recent study (Babad, 2005b), students demonstrated their uncanny expertise in deciphering unknown teachers' differential NV behavior. Girls in 11th grade watched 10-s clips in which teachers were lecturing frontally to their entire classes, and were asked to guess how differential each teacher was in treating low- and high-achievers. Even from public lecturing, the girls significantly predicted TDB. Adult judges were not capable of making such guesses successfully. Teachers believe that they can conceal their preferences and control their behavior (Babad, 1995), but again and again students prove that they are sensitive to perceive those hidden NV behavioral nuances.

In the more recent studies (Babad et al., 2003, 2004) teachers were videotaped during a regular class session, and 10-s clips of their NV behavior in different instructional situations were rated by foreign judges who did not understand the verbal content. In the high school study (2003) one of the instructional situations depicted teacher's interaction with a student (who was never seen on the video clip). These clips were subsequently separated into interactions with high- and with low-achievers, which provided a direct measure of NV TDB from the naturalistic classroom flow. These clips were rated by the foreign judges. In addition, the students in the investigated classrooms filled out questionnaires assessing their teachers' TDB. The students' ratings and the judges' ratings of the thin slices of the NV clips confirmed and validated each other. Thus, 10 s of content-free NV teacher behavior are enough to diagnose TDB.

Psychological Price of TDB

Conceptually and ideologically, TDB constitutes bias, and teachers' deviation from equitable and fair treatment of all students in the heterogeneous classroom represents a serious problem (Weinstein, 2002). It is true that extra learning support of weak students in order to improve their relative position is legitimate, but there is no justification for the extra emotional support given to the high-achieving students.

Given (a) that the tendency to demonstrate TDB is distributed among teachers, and (b) that teachers are not successful in hiding their TDB and students are well aware of it, one should consider the psychological price, whether teacher differentiality would cause damage to students and to classrooms. "Damage" was assessed through measures of classroom climate and students' evaluations of their teachers (SRT), and these outcomes were examined as a function of teachers' level of differential treatment of students. In the earlier studies (Babad, 1995), TDB was measured through students' perceptions, with no direct empirical measurement of actual NV behavior (although NV behavior was presumed on the basis of the Babad et al.'s, 1989b, results). In fifth

and sixth grade, classrooms with higher rates of TDB demonstrated lower morale, more dissatisfaction, and students were angry at their teachers. These relations were stronger for differential behaviors in the affective domain, and less strong for learning support. Students were also angry about the "teacher's pet" phenomenon – which reflects a special emotional ("love") relationship between teacher and one or two pets – especially if the chosen pets in the classroom were not popular and not liked by the other students.

The Babad et al. (2003) study was conducted in 10th and 11th grades, and here teachers' NV behavior in their interactions with low- and high-achievers was actually videotaped and rated by groups of stranger judges. TDB was computed as the difference between judges' ratings of the NV interaction clips with the two types of students. The results were extremely strong: Students demonstrated intense anger at more differential teachers and gave them very low evaluations. Compared to the elementary school pupils in the 1995 study, in the case of the advanced high school students of the 2003 study, the anger was not limited to differentiality in the affective domain, and the students were angry at *any* form of teachers' differential treatment.

In summary, much as 10s of teachers' positive NV expressive behavior can predict SRT, student satisfaction and their sense of having learned, 10s of teachers' differential, inequitable NV behavior can predict damage to classroom climate and to students' morale, and affect students' reactions to their teachers. Of course, the "10-s" sample represents teacher behaviors that accumulate over time and are continuously experienced by students. And yet, the 10-s sample contains so much relevant information, that judgments made by strangers after exposure to this brief instance alone can reliably predict the educational outcomes. Although the behaviors are subtle, implicit and seemingly invisible, their influence on students is intense. Thus, teachers' NV behavior plays a major role in shaping the school experience of their students.

Applied Lessons

I asked at the onset what should teachers know about NV behavior and how can they make use of this knowledge in the classroom. The applied lessons can be summarized most succinctly as follows:

- Teachers should develop sensitivity and decoding ability to derive maximum information from students' NV behavior, in order to make classroom management and teaching more effective.
- 2. Teachers can increase their teaching effectiveness by improving their NV enthusiasm, immediacy, and expressive style. Some of these skills (not all, not always) are trainable (see Babad, 2007).
- 3. Teachers should struggle incessantly to maintain their fairness and equitability in interaction with students, and to avoid TDB in the classroom as much as they can, especially in the affective domain. Perhaps self-control is preferable to spontaneity, especially if spontaneous behavior would be preferential.

4. Smug belief about one's ability to hide one's expectations and true feelings, together with the complementary lack of belief in students' ability to diagnose the teachers' NV behavior, are detrimental to effective teaching and to positive classroom climate.

Biographical Note

Elisha Babad is Anna Lazarus Professor of Educational and Social Psychology and former Dean of the School of Education at the Hebrew University of Jerusalem in Israel. His research has focused on the social psychology of the classroom, teacher–student interaction, and NV behavior. He investigated self-fulfilling Pygmalion and Golem effects in the classroom, teachers' susceptibility to bias and their differential classroom behavior, and the teacher's pet phenomenon. Recent research examined thin slices of teachers' NV behavior and their effects on students' perceptions and judgments of their teachers, students' decision-making processes in selecting and dropping courses in higher education, and the psychological price of media bias in the NV behavior of TV interviewers.

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Section 9

TEACHING SPECIFIC STUDENT POPULATIONS

TEACHING AT THE SECONDARY LEVEL

Floyd M. Hammack and Dana M. Grayson

Introduction

This essay briefly traces the history of secondary education, the development of its curriculum and of its teachers, and describes the consequences of these changes for teachers and teaching. This background material allows us to then focus on research concerning contemporary issues and policies in secondary teaching, including teacher quality, the sources of challenges to successful secondary school teaching, and some of the efforts to increase the effectiveness of schools and of teachers.

The History of Secondary Schooling and Adolescence

Secondary education initially was developed to prepare students for college entrance examinations. Those who did not aspire to college did not attend. Thus, until well into the latter half of the nineteenth century in the US, and later in most other countries, secondary education was an uncommon experience in the life of youth. Entrance to these schools was itself tightly controlled by rigorous examinations that only a few could pass (Reese, 1995). Most youth had only a few years of sporadic education, interrupted by family and work obligations, before working full-time and starting a family. The vast majority of nineteenth century populations resided in rural areas and worked in agricultural occupations. Family formation began well before the second decade of life was passed, and a period of time between childhood and adulthood hardly existed. Adolescence as we know it was a phase of life experienced only by the children of the wealthy (Kett, 1977). Moreover, education was a peripheral activity for most, connected most importantly with religion, the church and developing ideas of the nation state (Meyer, Nagel, & Gordon, 1979).

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The Effects of Urbanization and Expansion on Secondary School Teaching

As the nineteenth century merged into the twentieth, however, in North America and much of Europe, the Industrial Revolution had taken hold strongly. Urbanization expanded and economic activities changed accordingly. School enrollments grew rapidly. Initially, elementary education expanded in both urban and rural settings, and after 1880 in the US, secondary enrollments doubled each decade until World War II. The transformation of US secondary schools into comprehensive curricular organizations from those devoted to college preparation, begun in the latter years of the nineteenth century, was complete by the middle of the twentieth century. The debates over entrance examinations into the evolving secondary schools were very similar to the debates today over increased testing under the US No Child Left Behind legislation, and the uses of the SAT and ACT examinations in US colleges (Reese, 1995). Eventually these examinations were dropped, as attendance in secondary schools became the norm. Programs linked to labor market opportunities and citizenship became dominant in many schools, though the college preparatory course remained important in the curricular offerings of most US secondary schools.

The expansion of US public high schools in the late nineteenth century resulted in a rise in the demand for secondary level teachers. Recognizing this demand, colleges and universities began forming schools of education and creating teacher training materials based on educational research on school systems. It was generally acknowledged that normal schools, which previously dominated the market in teacher training, were adequate for training elementary school teachers, but universities claimed that they were better suited for training high school teachers. Additionally, many university administrators believed that the primary purpose of high school should remain college preparation, and therefore maintained a central role in creating high school curriculum even when much of it became more vocationally oriented. Ultimately, normal schools transitioned into broader vocational training, and most had closed down before 1920, leaving colleges and universities to train teachers.

As secondary enrollment increased, adolescence increasingly became a period of life experienced by larger proportions of youth and was largely defined by attendance at school. In upper elementary grades and in secondary schools, youth spent time away from adult responsibilities and increasingly in their own company. As Fass (1977) shows, by the 1920s youth culture blossomed as those youth still in school during their adolescence began to define themselves in contrast to the adult world. By the post-World War II period, this group had become a majority of youth, and secondary enrollment became almost universal. The diversity of student academic skills and aspirations grew as larger and larger proportions of each age cohort completed elementary school and moved on to secondary schools. This diversity strongly affected the relationships teachers could develop with students and encouraged the growth of non-academic curricula. By the middle of the twentieth century, a minority of secondary students anticipated moving on to college.

In Europe, secondary schools developed differently, and often according to patterns unique to each country. A common pattern, however, was a segmented system, with a common lower secondary school for youth up to age 15 or 16 and an optional, selective upper secondary sector devoted to preparing students for the national university examinations. These upper secondary schools were oriented to the university and often had staff that maintained their ties to the disciplines at their university. In contrast, the US comprehensive high school was more closely tied to the lower, elementary sector. Its enrollment was intended for everyone; its curriculum was increasingly tied to immediate labor market opportunities for its graduates, not university disciplines; and, its teachers less commonly identified with their professors (Clark, 1985).

As urban concentration developed through the latter part of the twentieth century, suburbanization expanded. Rings of bedroom communities surrounded impoverished center cities in the US, and residential segregation became the norm. The schools, too, were segregated, even after the Brown v. Board of Education Supreme Court ruling outlawed legal separation of the races. This segregation was not only demographic but also economic, creating very different education environments for students and their teachers. The inequality of these educational environments was exacerbated by US traditions of local control and financing, which has increased the "achievement gap" that so prominently motivates school reform today (Rury, 2004).

In Europe, a different pattern developed, with the suburban rings often populated by immigrants and the working classes, producing segregation between the center and the periphery of cities, reversing the pattern usually found in the US Whether in the developing world, Asia, or Europe and North America, however, access to educational opportunities has become a universally identified issue. International agencies, such as UNESCO and the World Bank, now routinely assess the equality of educational opportunity afforded to all members of a nation's population as part of their effort to stimulate economic and social development.

In an effort to reduce the large differences in academic achievement among races and economic groups, US reformers have been seeking to reduce the problems many youth experience in moving from secondary school into higher education. Termed the "college for all" philosophy by Rosenbaum (2001), this perspective sees universal access and success in college as the goal of secondary educational reform. Such a vision is only possible because of the large expansion of the post-secondary sector since World War II. Virtually all parts of the US higher education system, as well as that in most oher countries, have grown enormously. In addition to long established universities, whole new sectors have been created in this transformation, including community colleges in the US and a variety of short-cycle and general-purpose colleges around the world. The variety of post-secondary institutions in the US is based on the relatively large private sector as well as many forms of public institutions, ranging, like the private sector, from highly elite to those open-admissions college, that accept virtually all applicants. However, some scholars, such as Rosenbaum (2001), are not confident that the turn away from vocationally oriented secondary education is a good idea. These researchers point to low rates of college success among many high school graduates who are not well prepared for college-level work, but have not developed alternative career trajectories.

Converging Models of Education in the Modern World

There is good evidence that models of education across the world are converging. In part, this seems due to the necessary adjustments required as enrollments expanded from elite segments of the population to increasingly diverse and more representative cohorts of youth. Classical programs of study have all but disappeared across Europe and their colonies, as they have in North America. In their place, according to Kamens and Benavot (2006) more comprehensive models have emerged, often with several courses of study to respond to increased student diversity. At the same time, there seems good reason to believe that a new conception of the purpose of secondary education has spread around the globe. A new "cultural frame" has emerged for schools whose role it is to be flexible and inclusive, and to offer choices relevant to the future society that students will join.

In this new model, teachers are not simply making university sanctioned subject matter available to students who aspire to the university and beyond to professional careers. Rather, secondary teachers are now an integral part of the incorporation of youth into societies demanding greater levels of knowledge of its citizens. Whether teaching in more or less comprehensive systems, secondary teachers are now concerned not only with the degree to which their students master the required curriculum, but with helping to create modern citizens as well. This multiplication of the roles of secondary education has a strong impact on teachers and teaching in these schools.

Teacher Quality

In the search for factors associated with student learning and achievement, US researchers have sought to identify the importance of certain characteristics of the student, the school, including its students and resources, and the teacher. In some of these original research efforts, Coleman found that while school and teacher characteristics had effects on student achievement, these results were not as important as individual and aggregate student characteristics. Family socio-economic status, for both individual students, and the average for the school, were found to be more closely associated with achievement than were school resources or indicators of teacher quality, such as degrees, licenses, and years of experience (Coleman et al., 1966). Nevertheless, Jencks and colleagues (1972) found that differences in achievement among students in the same school were larger than differences between schools, supporting the conclusion that variables within schools were important (also see Gamoran, Secada, & Marrett, 2000).

More recently, researchers and policy makers have concentrated on teacher quality issues as a main source of these school-level effects. Researchers have consistently found that the socioeconomic status of a school's students was inversely related to indicators of its teacher's quality. Thus, US schools serving poor students are more likely to have inexperienced and unlicensed teachers teaching subjects in which they did not major or minor while in college. Research by Richard Ingersoll (1999) found that roughly a third of mathematics teachers, a fourth of English teachers, and only a slightly greater percentage of science and social studies teachers at the secondary level have majored or minored in their respective fields. These data do not take into consideration training outside of a formal degree, or qualifications earned through on-the-job experience. Furthermore, there has been no reduction in out-of-field teaching from 1993–1994 to 1999–2000, and significant increases in schools with high levels of poverty and minority student populations (Jerald, 2002). Also, the evidence is that out-of-field teachers often rely more on textbooks for content knowledge, and are less likely to teach lessons involving critical thinking.

Teacher turnover is higher in schools serving poor communities, preventing teachers from developing strong mentoring relationships, teacher collegiality, and a strong sense of collective responsibility for student achievement. These staffing difficulties have led some districts to hire temporary teachers and to create programs of alternative certification, such as New York City's Teaching Fellows Program, or the national Teach for America program. These programs usually provide short, intense training for those who have performed well on school subjects in college or in the professional world, but have not taken the standard teacher education program. They are placed in classrooms, often in the most difficult schools, with mentors, and enrolled in graduate degree teacher education programs.

Conclusive research data on these programs are lacking, due to wide differences in the components of these programs and the fact that much of the research comes from internal sources, which may be slanted to best serve the interests of the program itself. Critics of alternative routes to certification claim that it is bordering on unethical to assign inexperienced teachers to low-performance schools, and that retention rates after the initial required commitment are disappointing. Advocates maintain that many recruits hold subject-specific degrees from superior higher education institutions, are fast learners, and demonstrate hard work and commitment as teachers (Zeichner & Schulte, 2001).

Concern over mal-distribution of teacher quality has led to its prominence in contemporary educational policy discussions. In particular, an important provision of the US federal legislation, No Child Left Behind Act of 2001, focused on the goal of having all states develop a definition of a "highly qualified teacher" for each level of school and subject taught (Porter-Magee, 2004). By the end of the 2005–2006 school year, all teachers in all states were to qualify for this designation. The Department of Education requires that states have a test to assess subject area knowledge in the key subjects of standard elementary curriculum; for high school teachers, there must either be a test of content knowledge or a requirement for teachers to have a college major, or its equivalent, or an advanced degree or credential in the subject taught. By the end of 2006 no state had reached 100% compliance, and the federal Department of Education settled for evidence of a good faith effort and implementation of plans to achieve the goal from all states threatened by the withdrawal of federal funds if progress was not made. This requirement is a key element of the discussions taking place now about the reauthorization of the legislation.

The Challenges of Teaching at the Secondary Level

Secondary teachers face many challenges that are unique to the profession. Teachers must work with a large number of students all possessing different capabilities, engage in activities requiring concentration while enduring frequent disruptions, and work to pursue a variety of goals simultaneously, with oftentimes little or no support from colleagues or supervisors. Below we identify several sources of these challenges, including the structural characteristics of schools and the threats to teacher authority in classrooms.

Structural Challenges in Secondary Schools

Although there is currently an effort in the US to create smaller secondary schools, existing ones are typically much larger than elementary and middle schools. Teachers are often given an insufficient amount of time to address their students individually, since they can meet with upwards of 100 students per day for short blocks of time. Teachers often seek approaches that are efficient in serving the highest percentage of students possible, essentially targeting the average level of ability in the classroom and subsequently neglecting the higher and lower ends of the spectrum.

A further challenge is that adolescents often prioritize their social life or after-school employment before their academic obligations. In the US, 85–90% of secondary students see "getting by" as an acceptable level of academic effort (Brint, 2006). In other countries this figure is smaller, but as the proportion of youth continuing further in school increases, it appears to rise.

In the US, the expansion of vocational and general programs of study in secondary schools, created to provide value to all of their students, has been identified as diluting the schools' central educational mission. In seeking to serve colleges, local employers, and the civic society surrounding it, the comprehensive high school is seen by some as trying to do too many things, none of them very well. Yet, the diversity of the students they serve has led to the invention of programs of study that will engage the variety of students. Teachers often struggle to find material and methods of instruction that sustain student interest and still provide for the attainment of learning objectives increasingly identified by state-wide tests. "Teaching to the test" may compete with teachers' ability to respond to student interests, current events, and expressions of the teacher's own passions.

Student engagement in school is often associated with the degree to which educational achievement is relevant to adult success. In some countries, the connection between educational experiences and labor market opportunities is very strong, while in others it is not. For example, in Germany, access to many careers is restricted to those who pass through very specific educational programs, usually combining classroom instruction with on-the-job experience (Blossfeld, 1992). In the US, on the other hand, this kind of pipeline exists for only a few occupations. Many students graduate from college specializing in areas of study they will never pursue in the labor market. Rather than dampening educational aspirations, however, such loose connections may increase them, because the lack of a tight connection between an educational program and an occupation supports the notion that opportunity is widely available to those with credentials (Davies & Hammack, 2005; Rubinson & Hurst, 1997).

In part this may be due to a kind of "credential effect," where the value of an educational credential drops as a higher proportion of a population possesses it (Collins, 1979). Over time, as this inflation sets in, increasingly higher credentials are required for jobs that used to require lesser educational accomplishments. Along the way, the credential itself may become the object of student and employer attention, not the learning that initially was the foundation for the credential (Labaree, 1997). In the process, the student's motivation for achievement may decline, leading to disengagement with the intellectual work of learning.

Teacher Authority and Student Engagement

Teaching is further complicated by the challenges of behavior management at the secondary level. Adolescent students are old enough to exert their autonomy and, if they choose, to be a physical as well as an attitudinal challenge. As students far outnumber adults in schools, their compliance with school rules and procedures is necessary but sometimes problematic. Under the worst of circumstances, schools may reflect the custodial concerns of prisons—with metal detectors at the doors and armed police patrolling the halls. Even under the best of conditions, student compliance remains an issue (for a more general treatment of this topic, see Scott, 1990).

These challenges, to the extent that they exist, are framed according to the traditions and evolving cultures within each country. But, as societies, especially heterogeneous ones, draw higher proportions of their youth into extended years of school, such challenges are likely to grow. Sociologist Mary Metz (1978) explains that teacher authority is only possible when the super-ordinate (i.e. the teacher) and the subordinates (i.e. the students) acknowledge that the super-ordinate is more qualified to meet the best interests of the group. It is when the teacher begins to require more of the students than they are willing to give, or when the students become restless, that discipline becomes necessary. In order for teachers to gain and maintain control in the classroom, students must recognize the importance of education and the value of the credentials and knowledge that the school can provide them.

Student Resistance

Student resistance is an old topic in US educational research. The difficulty of gaining student cooperation is a common topic in histories of teaching. Discipline is a central concern in the materials about nineteenth century school-keeping brought together by Finkelstein (1989). More recently, Waller (1965, originally 1932) described the tensions between the objectives of teachers and of their students in classrooms of the 1920s and early 1930s. Contemporary research remains much focused on this topic.

For example, Willis (1981) argues that working class English secondary students may withdraw their participation in the moral order of the school and act to undermine teacher authority. Others claim to have identified a racial solidarity basis to Black students' lack of effort in school. Fordham and Ogbu (1986) describe a school where the epithet "acting white" is used to maintain ethnic solidarity by equating aspiration for academic achievement with identification with the White world.

Other researchers, who assert that the undermining of academic ambition is not prevalent in many schools, have challenged these findings; also, all groups seem to disparage the "nerds" among them (Tyson, Darity, & Castellino, 2005; Harris, 2006). Harris argues that many minority and poor children enter school with lower levels of preparation for the academic requirements of schooling and fall further behind as the years pass (also see Lee & Burkam 2002). While all children learn at about the same rate during the school year, though they begin and end at different points of achievement, the summer learning gap produces annual increases in the average differences. During the summer months, poor and minority children are less likely to have experiences that maintain their cognitive growth than are the more privileged students who attend summer camps and organized activities of many kinds (Alexander, Entwistle, & Olson, 2007; Downey, von Hipple, & Broh, 2004; Lareau, 2003). The engagement in school of low performing students suffers as a result of their lack of progress in comparison to other classmates and to the expectations of the school. Discounting the value of what they are unable to achieve is a natural response, Harris asserts. The causal chain supported by this research goes from failure to alienation and disengagement, not the other way around.

Daniel McFarland challenges those who claim that race and class are primary factors influencing student defiance, and argues that organizational characteristics of classrooms and teaching styles have a more significant impact on student resistance in the classroom (2002). His research finds that teacher-centered instruction maintains better order in the classroom, and teachers can increase student engagement by making lesson plans explicitly relevant to students' lives and interests. Furthermore, by consciously grouping students across, not within, their social groups, and rotating leadership roles, teachers can create social settings in the classroom that are less conducive to student resistance.

Teacher Collegiality: Professional Communities in Schools

Research findings suggest that "successful" schools are generally characterized by a staff and administration that value collegiality and engage in frequent discussion with a diverse array of colleagues about best teaching practices (Little, 1982). Lack of a shared space or common preparation time can prevent teachers from interacting and sharing ideas. Zahorik (1987) found that lower levels of collegiality are directly linked to schools with higher levels of poverty, and that schools need to encourage teachers to be "less private" with their teaching practices for the betterment of the school as a whole. These schools are characterized by higher numbers of teachers

with only a few years of experience or teaching out-of-license, and thus more likely to be defensive about their skills and less likely to seek collegial feedback. They also are less likely to present lessons with the passion and competence that can generate student respect. Additionally, such teachers lean towards more conservative or practical teaching practices and are reluctant to try out new methods, preferring to merely make it to the end of the day. A sense of collegiality and collective responsibility for student achievement are elements of successful schools that are beginning to receive greater attention along with an increasing focus on the professional development opportunities provided to teachers (Gamoran et al. 2000). Clearly, resources are important in improving education, but so too is an emphasis on the relationships among teachers, administrators, students and their parents (Bryk & Schneider, 2002).

Conclusions

We have briefly described the evolution of secondary education and identified some of the enduring problems that history has generated for teachers and teaching. We note that sociologists and other researchers are beginning to emphasize more strongly the study of school and classroom characteristics processes that affect student learning and how this learning is situated in the out-of-school lives of students. While the role of education in the status attainment process and its more general relation to other structures of society will remain topics of enduring concern, we welcome a renewed interest in what Saran S. Boocock (1972) termed, *The Sociology of Learning*.

While teaching well is a demanding craft at all levels, teaching at the secondary level faces complications and complexities not found in elementary/grammar schools or in post-secondary institutions. Knowing one's subject matter is the beginning of competence; knowing how to successfully communicate that knowledge to groups of teenagers who are not always willing and eager learners is equally a requirement for good teaching and successful schools.

Biographical Notes

Floyd M. Hammack is Associate Professor of Educational Sociology and Higher Education at The Steinhardt School of Culture, Education, and Human Development of New York University, where he is the Director of the Program in Sociology of Education. His recent work has included editing the volume, *The comprehensive high school today* (New York: Teachers College Press, 2004), and the 2005 paper, with Scott Davies, "The Channeling of Student Competition in Higher Education: Comparing Canada and the US" *The Journal of Higher Education*, 76, 1, 89–106. He has co-authored, with Jeanne Ballantine, the 6th edition of *The sociology of education: A systematic analysis*, from Prentice Hall in 2009. His interests center on secondary school reform and especially how the evolving relations between secondary and postsecondary education influence each other.

Dana Grayson received her Master of Arts in the Sociology of Education at New York University, completing her Masters thesis on reauthorization issues for the federal No Child Left Behind Act. During her time at NYU, she worked as a research assistant on higher education and teaching the secondary level. Her own studies have primarily focused on the inequalities in public schools, public school choice, and education policy reform. Before attending NYU, she worked as a public school teacher in Brooklyn and the Bronx through the New York City Teaching Fellows program. Presently, she works as a Legislative Aide for education, housing and other social issues for the United States House of Representatives.

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TEACHING AT TERTIARY LEVEL

Linda Hort

Introduction

Teaching at higher education level is about the discipline.

I mean this in two senses. It is about the academic discipline, the field of study which underpins the content that creates the basis for the teaching. Picking up on this meaning, recently, teaching within universities has been described by some higher education writers as 'research-led' (Jenkins et al., 2003). The importance of such a description of their teaching for those who teach in higher education is that students are being taught about *being* 'historians' or 'biologists'. Academic disciplines have been described as 'territories' guarded by 'tribes' (Becher & Trowler, 2001). More recent work on academic 'practice' has identified practices and 'arrangements' which are characteristic of particular disciplinary points of view (Beckett & Hagar, 2002). What this describes for teaching at tertiary level is a certain set of academic cultures with a specific set of customs and practices. This results in a set of norms, or a set of particular approaches to 'ways of knowing' in differences impact the teacher and the learner in ways that are not found in teaching at other levels.

The second sense of discipline is also important in tertiary teaching. Here students and teachers are *disciplined* about the way in which they approach the content. In common parlance within higher education, 'scholarly', is the word which often signals this characteristic. High level skills such as analysis and synthesis are developed and the ways in which these skills are demonstrated can be quite specifically described (Barrie, Clegg, Coe, Harper, & Kiley, 2006). As increasingly 'autonomous' learners they learn how to learn and how to evaluate and apply their own learning (Boud, 1988). When this autonomy is not sufficiently exercised, students can fall prey to an accusation of an 'undisciplined' or 'unscholarly' approach. This might be incorrect referencing, a lack of use of primary sources, an incorrect way of mounting an argument (or of even understanding what an argument might be), or an unsupported way of speculating or synthesising.

The combination of these two 'disciplines' creates a teaching environment which differs, in higher education, from other educational environments. Some literature is now being published on this very specific activity and the learning which results

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from it (e.g., Brew, 2001; Bowden & Marton, 1998). This literature, in combination with the older treatises on universities and higher education (e.g., Barnett, 1990), is important as higher education is responsible for training the minds that make the ground breaking discoveries of our time. The products of the higher education system, the scientists, the engineers, the anthropologists, the writers and publishers, impact our understanding of ourselves and our societies more than any other contributors. So how are the teachers in this specialised, high level endeavour chosen and equipped for their jobs? The nature of such teaching, and the role of the teacher and the learner in this system, creates quite a specific approach to recruitment, to the education and credentialing, and to the professional performance of academic teachers. It is these matters that will be discussed, in turn, in this chapter.

Recruitment of Academic Teachers

Teachers in higher education, in contrast to school teachers or other non-university post-secondary teachers, are characterised by their expertise and scholarship in a particular discipline or profession. A survey conducted by Anderson, Johnson, and Saha (2002) found that when asked about the influence of their research on their teaching, two thirds of their academic participants responded that it was 'very important', while only 3% said that it was of 'no importance at all'.

In my own country of Australia, there are, as yet, formally within the higher education system, no career positions which are 'teaching-only' positions. The same appears currently to be true in the United Kingdom.

The system in the USA is different. With a different structure of public and private universities, some of which are teaching oriented, a more differentiated recruitment structure is in place. Indeed, it is due to such differences that many developments in measuring teaching effectiveness have emerged. The research universities in the States, however, and many of the research intensive universities in Europe and the Asia Pacific, follow the UK model, due in part to the greater prestige of these more research intensive universities. For example, the PhD qualification has recently been made compulsory for applicants for teaching positions in universities in India. However the PhD is a long process, which often needs to be taken out-of -country, and financial support is difficult to find and can be meagre. Despite this, India is following the trend described, even though large numbers of academic positions in India are now unfilled (S. Kalimili, personal communication, 2007).

Even in research intensive universities, the debate around teaching-only positions abounds and it is argued that some low level, often casual or short-term-contract employees, called 'tutors' in Australia, or 'teaching assistants' in the US, are in fact 'teaching-only' positions. It has recently been estimated that in Australia and the US (where these employees are called 'gypsies') as much as 30% of the teaching is done by these people (Anderson & Saha, forthcoming). However these positions are held usually by either higher degree (such as doctoral) students, or by professionals working outside of the academic context. In both cases the academic nature of the higher degree study, or the professional nature of the employment which the 'tutor' does most of the time, are seen as more important than their teaching abilities. So, while employed casually, only to teach, their expertise in the discipline is what is critical in their employment.

Research that looks at how academic teachers are recruited is scant. Handbooks on career development for academics are one of the few avenues for determining how recruitment and selection is conducted. It comes down to academic discipline. Despite published material that demonstrates that, when measuring teaching through student evaluation of teaching (SET) scores, and research through publication of journal articles and books, that there are those who are excellent teachers and researchers, those who are excellent at one but poor at the other, and those who are poor at both (Marsh & Hattie, 2002), the 'teaching-research nexus' remains the key construct invoked when recruitment and selection are undertaken. Hence those who have the research credentials and outcomes are selected, with the assumption that they can also teach, despite the evidence that they, or other less research-active candidates, may include in their application.

The basis on which these decisions are made is the applicant's curriculum vitae. There is an art to reading a 'curriculum vitae'. Casting an eye over the publications to determine the quality of the journals and the rate of publication year after year, is combined with a scan over the teaching evaluation scores – to determine that they range somewhere close to the 5 out of 7 mark – to determine the 'best' applicant. This is decided in part by a determination of which applicant seems to be able to contribute best to the academic department, the aim of which is the advancement of the academic discipline.

Traditionally, selection decisions have been based mainly on the quality, quantity and field of the published research. Inclusions of 'evaluations of teaching' remain relatively recent in higher education. Emanating from the USA, where they have been developed for assistance with selection for, or recruitment into, student oriented teaching colleges, teaching evaluations began to appear in Australian applications only about 40 years ago. More selection processes in Australia now require 'evidence of teaching quality' or even 'a teaching portfolio' but the ways is which these are processed by panels for recruitment and selection, or even for internal selection decisions such as promotions, is not yet well understood. Training to read evaluation scores or teaching portfolios has been provided in some universities to attempt to address this (P. Ramsden, personal communication, 1999).

Even those applicants who can provide such evidence may well be more interested in the research aspect of their position than their teaching performance. Research in Australia (Anderson et al., 2002) shows that the interests of a majority of academic lean towards research rather than teaching. The question in the study was: 'Do your interests lie mainly in teaching, research or administration?' The Australian data showed a reasonable spread with research being rated as more important by 54%, compared with 39% for teaching. It is noteworthy that 'administration' was the chief interest of only 5%.

The core skill of 'networking', seen in recruitment and selection through the referees listed by the applicant, is often thought to give the best guide to a candidate's 'fit' into the disciplinary orientation taken by the institution. So in terms of recruitment for academic positions in Australia and the UK, candidates, who normally have an orientation to research, are assessed against research performance and their ability to show their 'fit' with the theoretical orientation of the academic department through their network of referees. The best 'qualified' of these are recruited to advance the discipline and the disciplinary framework within the academic department. Again, they are not being recruited expressly or explicitly for their ability to teach, or to enhance student learning.

Education and Credentialing

A research degree in the relevant discipline is considered fundamental for academic employment. Doctorates are held by around two-thirds of university academics in both Australia and UK. There is considerable variation by field: in Australia over 90% in science and mathematics; around one quarter in law and architecture (Anderson, Arthur, & Stokes, 1997). This qualification is routinely seen as necessary for appointment to a role of teacher and researcher; indeed, it is often a sufficient condition.

Recently some universities have been also asking staff to undertake some training in education. While such training is voluntary in some universities, it has been increasingly common in Australia, UK and Europe, to expect academic staff to complete an award programme in higher education. In some universities in those countries it is now compulsory for new academic staff. In the main, the universities themselves run such programmes, since general courses in education, pitched at the primary or secondary level teacher, neither meet the needs of, nor are able to retain, teachers at the tertiary level. From experience, those engaged in teaching such courses have learned that the best approach to such education credentialing in higher education is the 'reflective practitioner' model. No one approach to education is advocated. Rather staff undertaking such courses are taught the value of 'action learning'. They develop ways of approaching their teaching which they are then encouraged to explore, with appropriate collection of evidential feedback. Armed with this feedback they reconsider and revise their approach and to their teaching. Again they collect feedback and reflect once more on what this feedback is telling them about how they need to further modify their approach. Such a reflective cycle has been found to be the best way in which the disparate range of individuals coming from the diverse disciplines within the university, and the range of conceptual approaches within each of these diverse disciplines, can best be equipped to 'continuously improve' their teaching and the educational experience for students.

The reflective teaching portfolio, often used as the vehicle to demonstrate competence in this process for credentialising, is a specific instrument. Starting with a statement of 'teaching philosophy', the portfolio includes information about the rationale underpinning the educational approach and outlining evidence that demonstrates the success, or lack of success, of educational practice. The portfolio often includes a full description of the 'action learning cycle' applied to one or more teaching exemplars or case studies, and finishes with statements of intent or aspiration about future educational goals. While this form may be applicable to any discipline it is a form of writing that sits more comfortably with the social sciences. Those in the humanities, sciences and the applied disciplines such as law or management can find such a form confronting and uncomfortable. The consequent 'privileging' of the 'educational discourse' over all discipline forms within the higher education context is one of the problems with its adoption as a credentialising mechanism, and its use remains limited within the sector.

Professional Performance of Academic Teachers

The professional performance of academic teachers has mostly been assessed through a process of internal promotion. Processes of recruitment and selection can also be argued to assess performance (indeed, academic promotion has been seen as being a case of 'internal selection' rather than the externally oriented selection that constitutes recruitment). More recently, there have been performance reviews, in some cases leading to performance or merit pay. Universities have also introduced probationary periods, with a genuine attempt to assess work performance before 'confirming' the appointment. The confirmation of tenure process in the US contains similar assessments. The introduction of 'teaching awards' has provided other ways in which to assess professional performance.

In all these instances, in academic teaching, the applicant is not directly observed but is required to write an application making a 'case'. The making of a case implies that there are no specific performance 'standards' that must be met. Rather the applicant takes the performance criteria such as 'demonstrated ability to teach large classes' or 'capacity to stimulate curiosity and inspire learning' or 'outstanding performance in the area of teaching' and makes their own argument about their skill in relation to the criteria. The effectiveness with which candidates address these performance standards and bring evidence of differing kinds to bear on the areas in question, will inevitably vary from discipline to discipline. It will also vary in line with the reflective capacity and communication skills of the individual and the awareness they have of the need to make a case. While not indicating that there is no validity to the judgements made here, the possibility of 'image management' is high, and relates again to the networking, or disciplinary associations, made by the staff concerned.

Research has indicated that academic staff often believe that a case for promotion cannot be made only on the basis of teaching (Akerlind, 2003). This is not seen to be the case for research. However while research has metrics available to it, in terms of numbers of publications or quality of journals, that range from no publications to a specific number (such as five refereed publications over each of the four past years), teaching tends to be more uniform. 'Teaching in two courses each semester, one of which has a student enrolment of over 200, and with SET scores averaging 5.3 (out of 7) or above' could characterise the teaching of very large numbers of academic staff world wide. The 'variability' that can be used to make a case for promotion or merit pay for research therefore, is much better able to be moted that it does seem to be becoming harder to be promoted without teaching being considered, and that there

is increasing recognition that the teaching should be at least satisfactory. In the example quoted above, there may be little difference between academic scoring 5 out of 7 and those scoring 6 or more out of 7 in terms of their promotion chances (whereas in fact this represents quite a difference in the quality of teaching delivered), but an applicant presenting scores of 3 or 4 out of 7 might have serious questions asked about their promotability, even with excellent research, as such teaching performance would not be seen as at a satisfactory level.

In the past two years, in Australia, a Government funded Institute to enhance the status of teaching and learning (the Australian Learning and Teaching Council) has made some inroads in the valuing of teaching performance through teaching awards. Each year Carrick offers between 250 and 300 awards to academic staff, and each of Australia's 40 universities is competing for a share of these awards. Being able to say that an institution has been awarded 13 of these awards, as mine was last year, does help that institution with its marketing, especially as most achieve between 5 and 8 such awards. In conjunction with that, the individual staff winning these awards can now use such evidence in their promotion applications. Such success is rare enough to allow a committee to make a decision, if not solely on the basis of teaching performance, then, for the first time, on a case aimed at highly valuing teaching. However, in winning these awards, no person goes to the classrooms of the winners, rather the case made, and the examples and evidence cited in the case, are used to make these judgements. While the criteria that underpin the presentation of such evidence and examples require a range of activities that do characterise a dedicated and student oriented approach to teaching, it should be noted that those excellent at presenting a case are likely to do better in such awards than those who may well be doing as thorough a job but who are less able to write about it in a convincing and captivating way.

Tertiary Teaching and the Student Experience

It has been argued in this chapter that tertiary teaching is different because of the disciplinary nature of tertiary teaching. The role of the discipline, and discipline 'networks' has been examined in the processes of recruiting staff, in the education and credentialing of academic staff and in the understanding of professional performance of academic teaching staff. Clearly disciplinary knowledge and integration within the disciplinary culture is key for staff to be appointed to an academic teaching position and retained and rewarded in that position. But what do students make of this? University courses are sometimes professionally oriented and in this case can be multidisciplinary. Learning to be a 'nurse' or an 'accountant' draws from a range of disciplines that might include biology, psychology and sociology in the first instance, and mathematics, information systems and finance in the second. Even when students are not studying for a professional qualification in which disciplines are combined, they often choose courses that reflect a range of disciples. The humanities student might be studying literature, French and history; the science student mathematics, science communication and genetics. How do students negotiate the range of disciplinary variations delivered to them?

The short answer is that often they do not do this well. The 'discipline' of the learning required in higher education often means that if the student has mastered the referencing system well in one discipline, they will have it wrong in another. If they have learned to argue a case or develop a thesis in one discipline they will be writing in the wrong 'genre' for another. Few students work out these disciplinary differences and what is happening in terms of their experiences and the feedback they are receiving. Instead of understanding the different disciplines, they decide that they are 'good' at history, but not a French, say, and go on possibly to study history at honours level and find themselves being inducted into the academic discipline of history. If they go on with study through to a research degree and become academics, then they too teach the 'disciplines' of history, without ever really understanding how specific these are to their own disciplinary training. There are a many situations in which such specific disciplinary knowledge and 'disciplines' become important. Academic honesty is seen as one area in which this cultural underpinning of the discipline becomes very obvious. What might be 'paraphrasing' in one discipline might be plagiarism in another. What might be 'data smoothing' in one scientific area might be fraud in another. The task for the student can be a very difficult one indeed!

Conclusion

The nature of tertiary teaching, its discipline basis, the processes of recruitment, educational and progression that derive from that, and the nature of the student experience within universities, all mean that students within higher education find themselves socialised into the discipline knowledge and the methodologies which underpin the fields in which they have chosen to study. Those who go on with their education, to do research degrees and become employed in the higher educational institutions, re-create the cycle (Beiber & Worley, 2006).

The discipline, in both senses, conveyed through the teaching by those selected and developed in the ways described in this chapter contribute to that. Is this the best approach to creating the best minds of our society?

It could be argued that those trained in and selected for their research skills are best able to teach the autonomous learning skills that higher education students acquire. However, teaching in higher education is not well suited to breaking either the paradigm of the discipline or the teaching approach for which the outcome is the creation of minds which are at the cutting edge of knowledge. A re-conceptualisation of knowledge, or approaches to understanding or to practical activity based on learning which is of a kind other than described in this chapter is not likely to come from tertiary teaching or from higher education (Kuhn, 1970). While it is interesting to speculate whether a different kind of teaching could create capacities in us, that could surpass the achievements of those who have been taught in this way, no conclusion can be reached.

Right now, however, higher education is changing. Increasing interest by governments world-wide in the learning outcomes of universities is being signalled by funding decisions that reward specific outcomes. The result of this may be a change in some of the fundamental values that underpin tertiary teaching. The debate is only just beginning, and its outcome will be uncertain. In the meantime, the system of disciplines and its training have held us in good stead until now. As the system changes let us hope that we can maintain, or improve, such results.

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Biographical Note

Linda Hort is the Director of The Centre for Educational Development and Academic Methods at the Australian National University. In addition to managing academic staff development within teaching and learning at that university, Linda has a national role on the Government Department's Advisory Group for the Learning and Teaching Performance Fund, as well as being an assessor for the Australian Learning and Teaching Council.

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TEACHING FOR TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET)

Hugh Guthrie, Roger Harris, Michele Simons, and Tom Karmel

Introduction

This chapter explores notions of teaching in technical and vocational education and training (TVET) settings. To do this we will

- consider the essential differences between vocational and academic approaches to education
- discuss the diverse approaches to TVET teaching and the directions in which conceptions of it are moving
- consider what the role of being a teacher involves and how teachers are trained and developed to enhance the quality of their practice and vocational competence, and
- finally, present some conclusions.

The authors' experience is largely in Australia and Europe, and so these will be the focus, and from where examples will be predominantly drawn. These are mature, yet diverse, TVET systems.

TVET systems are increasingly becoming recognised by governments as very important to economic development through their focus on skills for the labour market. They are also seen as instruments of social policy, for example to assist those in particular social groups, such as those in poverty, or who lack marketable skills (Basu, 1997).

Teaching in TVET takes place in a variety of locations, including schools, public and private specialised vocational education and training providers and in workplaces. In this chapter, we will focus on these more formalised and institutionalised approaches to vocational teaching and learning, although we recognise the value and importance of informal learning on the job.

Because governments have traditionally placed great expectations on their TVET systems, there are often high levels of government intervention in its provision. When governments or contexts change, so often do policies relating to their TVET systems, which in turn may strongly influence the vocational learning and teaching approaches within them. Change within such systems can often be rapid, frequent and challenging to those charged with teaching. However, for a variety of reasons interna-

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tionally (in Australia, for example, because of the emphasis on industry leadership), teachers have not been seen in many systems as stakeholders in these reforms, and therefore the policy changes have not always had the impact they should have at the institutional and classroom levels. Fortunately, in Europe and in other TVET systems teachers have now been recognised as crucial in making reforms work (Grootings & Nielsen, 2005; Grollmann & Rauner, 2007).

What Makes TVET Teaching and Learning Different?

There are a number of grounds to argue that vocational teaching and learning is different from general or academic teaching and learning. These grounds stem from the close association that vocational teaching and learning necessarily has with the world of work and the practical application of learning and skills. As we shall see later, the emphasis in approach has also shifted away from teaching content and more towards facilitating learning and empowering learners. We shall focus on five differences.

Differences in the Nature of Knowledge, Information and Experience

The first difference lies in the nature of the 'knowledge' being learnt. While in TVET procedural ('knowledge how') and propositional ('knowledge that') knowledge (Billett, 2001) are both vitally important, the emphasis tends to be on the former, particularly in the early stages of vocational learning. In learning at both school and university, it is propositional knowledge that tends to be the priority. Billet also emphasises the importance of dispositional knowledge, that is, the attitudes, values and other attributes that are central to the development of knowledge required for performance. This, too, is an emerging area of interest in TVET teaching and learning.

Another way to look at the differences between vocational and general learning is to think about how information and experience are represented in the mind (Simons, van der Linden, & Duffy, 2000). The three representations are

- Episodic which is based on personal, situated or affective experiences, or personal knowledge if you prefer,
- Conceptual or semantic which refers to concepts and principles and their definitions, and equates with propositional knowledge, and
- Action which refers to what can be *done* with the two representations above, and relates to procedural knowledge.

Again, while conceptual and semantic representations have been most highly valued in general or higher education, all three forms of representations are connected and the journey to skills, knowledge and experience can start anywhere. Some learn theory or generalise from practical experiences, while others prefer to use theory to inform practice. Those who undertake TVET programmes are inclined more towards action representations. They may be no less intelligent than their more 'academic' colleagues. It is just that their general education may not have offered them ways of connecting their preferred action representations with conceptual ones. And so they find themselves in TVET programmes and, perhaps for the first time, experience success as learners. The key message here is to find the right balance between preferred learning styles and approaches in the teaching programmes offered, and to ensure that pathways are always open to allow ready movement between school, vocational, higher and other forms of education. Otherwise early education decisions may significantly limit opportunities later in life.

Differences in How Learning Content Is Determined and Described

Secondly, the basis for determining content of vocational learning is different from that in many academic settings. (Vocational disciplines in higher education, such as medicine and engineering, however, have much in common with those in TVET.) In many countries also vocational education is necessarily responsive to industry needs and the economy generally. Its context is therefore founded in working and workplace imperatives just as much as, if not more than, learner needs or subject dictates. These powerful influences of work and the workplace on curriculum are acknowledged. However, the ways in which this is manifested continue to be the subject of much debate. Two contrasting examples are the Germanic countries and the Anglo countries. For instance, Germany strongly maintains its 'vocational principle' centred on the concept of Beruf (vocation), which promotes an holistic approach to curriculum design (Deissinger, 2004; Dilger & Hellwig, 2007) and which has been called the 'defining element' of the German apprenticeship system (Miller Idriss, 2002). On the other hand, Australia and the United Kingdom base their vocational curriculum more on discrete workplace competencies within a competency-based training framework (discussed by Burke, 1989, in the UK context, and in the Australian context by Harris et al., 1995 and its origins most recently by Hodge, 2007).

Many countries have adopted versions of the dual system typified in the German and Austrian systems. Competency-based approaches are now also being looked at seriously in many emerging vocational education systems, for example in Asia and Africa. Interestingly a more nuanced view of it is emerging in more mature TVET systems arising from the ongoing critiques of strictly behaviourist (performance-based) or cognitive (theory or knowledge-based) approaches to learning. These more nuanced views of 'competence' and how it is acquired are based on constructivist learning theories and see learning not so much as a product but as a process where individuals construct their own meaning so that they develop an approach to reality which allows them to act. In this case learning is a social activity and a dynamic yet context-dependent process. It needs meaningful learning environments and is dependent on tacit as well as more formalised learning approaches. This new and more nuanced conception of competence is emerging in Europe and relies on a more holistic view of what makes for competence (that is, capabilities, abilities, personal attributes and the ability to handle non-standard and critical work situations) rather than standardised knowledge and skills measured through observation of performance. Assessment is based on critical key tasks for the occupation. The outcome of this is to place far greater responsibility on TVET teachers, and relies on a high level of professionalism. It also suggests that a different emphasis in teaching may be needed, which moves from a somewhat atomistic approach to teaching and assessing individual competencies to one which is more holistic. It moves the

focus from attainment of competence to the progressive development of expertise. It demands flexibility, innovation and excellence in teaching.

Sites of Learning

Thirdly, in some countries vocational learning is front-end and institutionalised, and very similar to the sites of general education. It means that learners have little direct experience of real work in their chosen vocation prior to gaining their first job. In other countries TVET involves concurrent learning in both classrooms and workplace settings (either on-job, or off-job but still on-site), and recognises the value of both learning sites. This dual arrangement is particularly the case with apprenticeships, but also with more structured work experience programmes. Learning outside the classroom provides opportunities for learning through real work (or 'authentic' learning). It also offers a way of assessing in a real rather than a simulated work environment. It therefore complements and adds value to learning in an institutional setting and vice versa. Such duality, however, raises issues relating to notions of learning 'transfer' between learning sites, and how the teaching process can best provide complementary activities so that vocational learners can reflect on and integrate their learning from different sites and experiences (Harris et al., 2001; Hodkinson, 2005). However, in some cases, learning approaches are not well designed and integrated across sites so that neither one makes best use of the learning experiences occurring at the other. This situation highlights the importance of developing 'learning to learn' skills and the abilities to take advantage of informal, not just formal, learning episodes. TVET teachers therefore have an important role as 'connective specialists' by helping learners to 'connect' the various forms of learning they experience most effectively (Young & Guile, 1997). To do this TVET teachers need to maintain technical currency in their vocation, maintain and develop their skills in pedagogy and develop the abilities needed to work in both educational institutions and industry workplaces (Harris & Simons, 2006). We will return to consider the skills and attributes of TVET teachers later.

There are also issues relating to the partnering between TVET institutions and workplaces: who has the decision-making power in such arrangements, how can such relationships be developed and sustained, who pays, and how can TVET staff be trained to work effectively in both environments? While research on learning in

Box 1: The 'ideal' workplace learning situation

- Workplace learning is aimed at increasing the innovative capacity in enterprises
- Organisational culture supports and values training and learning
- Training and learning are part of doing business and are included as an integral part of the strategic planning cycle
- Training and learning in all forms are valued and used according to the appropriate circumstances
- Training is customised to individuals and to increase work capability
- Networks, partnerships and supply chains are used to facilitate training

classroom and institutional setting is both long-established and plentiful, in contrast, research on learning in workplaces has only relatively recently begun to be underpinned by learning theories derived from research. Box 1 (NCVER, 2003) describes the characteristics of the 'ideal' workplace learning environment.

Characteristics of the Learners

Fourthly, the characteristics of learners in TVET are arguably different from those in general education. In some countries TVET's focus is on those in the upper end of their school education, or on young people. In others, including Australia, TVET learners are often older as well, studying part-time on day or block release or in sandwich arrangements, involving periods of study interspersed with periods in work or work experience (Jain & Saxena, 2002). They may have had a wider experience of life before entering vocational programmes than learners in academic education. In other words, TVET may be focussed within particular age parameters, or may be seen as more lifelong or 'life-wide' (Maclean, 2004), encompassing a potentially rich range of formal and informal learning in a wide variety of circumstances. These characteristics raise issues for teaching in TVET such as how to handle recognition of prior learning (RPL) or in providing individualised approaches to teaching where learners can be accelerated through programmes based on their existing knowledge and skills. Alternatively, the teaching time 'saved' enables them to complete the programme more quickly, or it can be used to extend their knowledge and skills to higher levels, or to address learning needs in other relevant areas.

Moreover, learners in TVET come from increasingly diverse environments (Gray & Walter, 2002; Guthrie, Perkins, & Nguyen, 2006). For example, high proportions of these learners in some countries come from socially, linguistically and culturally diverse backgrounds, which may place heavy demands on support services such as literacy and numeracy and counselling for special needs learners. This raises the issue of the extent to which TVET teachers are adequately prepared to meet the needs of the diverse range of learners they may encounter.

Research has demonstrated that learning preferences of vocational learners are often quite different from those learners in academic programmes. As we have already seen, vocational learners tend to be more hands-on, activity-based, experiential and collaborative, to be more visual than verbal, and to be more reliant on teacher-led instructions and clear understanding of requirements and less on methods that demand self-direction and reading (Smith & Dalton, 2005; Misko, 1994; Warner, Christie, & Choy, 1998). These features promote questions about how well TVET teachers are equipped to deal with differences in learning styles in both classrooms and work-places, and with likely mismatches between their own learning styles and those of their learners, especially in workplaces.

The Status of TVET Occupations, Programmes and Teachers

There is at least one other -a fifth -key difference between TVET learners and those in academic education which has significant implications for teachers and teaching. Vocational education pathways have a very long history of having a lower status than

the academic, although this is probably truer for 'Anglo' than 'Germanic' countries. This may be because the occupations themselves have a lower societal status (for example, the relative status of the 'trades' versus those deemed to be 'professional'). Thus from school there is greater demand, and more first choice applications, for entrance into university than TVET, and universities have higher entrance requirements. Correspondingly, vocational teachers perceive themselves to have lower status than their general education counterparts, whether in schools or universities.

All of these differences call for, and draw on, different pedagogies. These distinctive characteristics of vocational learners and learning hold important implications both for teaching in TVET and for the recruitment and preparation of TVET's teachers.

What Are TVET's Approaches to Teaching and How Are They Changing?

Approaches to teaching in TVET draw on many traditions. One of these is a teacherdirected approach. This is based on seeing the teacher as the key focal point and providing access to much of the knowledge and skills that will be needed by a learner. Put simply the teaching approach is focused on learners viewing teachers as the 'sage on the stage'. This, in part, stems from the esteem in which these vocational teachers are held in some societies but in others this level of esteem was never there, or has changed. The second tradition is that of 'the guide on the side', where the teacher has a key role in facilitating, not directing, learning. This second tradition is gaining prominence in more mature TVET systems.

We draw attention to two significant changes in developed TVET systems. The first is a move towards as more nuanced view of competency-based approaches (as we have already discussed) and away from teacher-focused to more learnercentred approaches to learning. In this approach, the learner has an important and legitimate role in determining *what* learning will occur, *how* it will take place and often *where* it will happen (see, e.g., Attewell & Savill-Smith, 2005; Savill-Smith, Attewell, & Tribal, 2006, for a discussion of mobile learning). Responsibilities for teaching and learning are increasingly being shared between teachers and learners, and learners are becoming more empowered and more demanding. More skills in using self-directed approaches to learning need to be developed on the part of those studying TVET(and not simply assumed to be present) – and thus teachers need to provide teaching and learning experiences which encourage and foster these skills. Self-directed learning and 'learning-to-learn' skills are required by increasing proportions of society to help cope with changing work situations and also throughout life.

According to Smith and Dalton (2005), good teaching is now understood to involve a process of facilitating learning rather than being merely the transmission of knowledge from teacher to learner. The roles that teachers need to adopt to facilitate learning are outlined in Box 2.

So, put simply, the focus in TVET systems and institutions is changing from teaching to learning, and learners from passive receivers to being active partners in the whole learning process.

Box 2: Characteristics of teaching that facilitate learning

- Placing a strong emphasis on the workplace to provide a meaningful context for learning where problems are framed by the context of the workplace.
- Encouraging 'hands on' and interactive approaches to learning activities to allow learners to apply and interact equally with the thinking and performing aspects of learning.
- Establishing learning outcomes that are clear in their intent to achieve 'work-readiness' for learners.
- Giving learners the opportunity to collaborate and negotiate in determining their learning and assessment processes.
- Understanding learners as 'co-producers' of knowledge and skills.
- Recognising that the prior learning and life experiences of learners are valuable foundations for constructing knowledge and skill sets (although also recognising that they can also impose limitations).
- Using flexible teaching approaches that address the different learning styles of students.
- Valuing the social interactions involved with learning in groups.

Many learners in TVET are seen to have characteristics and dispositions which are different from those in more academic learning pathways. To help learners to succeed in work and life, TVET's 'teaching' approaches need to focus on project- and problem-based approaches to enable better links between theory and practice and encourage students to 'learn to learn'. This is not something that learners can automatically do. Teachers need to help learners to learn these key skills progressively, and thereby progressively empower them. Many learners will not gain these skills without the active support of their teachers and other learners. But teachers may, in turn, have to reconsider and give up cherished practices, for example being 'the sage on the stage' and other more teachercentred approaches.

The second significant change is towards more team-based approaches to teaching and learning. This means that teams of teachers are involved in taking a more holistic view of the learning experiences and how they will complement and add value to each other. These teams may also involve others who are NOT teachers working WITH them AND the learners to provide the most enriching range of experiences possible. These 'others' may include support staff in institutions and 'mentors' in the workplace. It is a move to a more multi-disciplinary and cross-organisational approach. It also opens the door – as Box 2 suggests – to learners being part of the teaching and learning 'team' and also helping their fellow learners to learn as well. Project- and problem-based approaches support this approach to teaching and learning. These approaches also have the sense of the 'real world' required by the new views of competence and allow a range of personal skills and knowledge, as well as interpersonal, teamwork and other key abilities needed in working life to be displayed and assessed.

Teaching in TVET: What Are Some of the Issues?

TVET systems are moving from ones concerned with standardised products and mass education to ones which are more individually tailored and focused to user needs. At their heart is an effective interaction between teachers and learners (Maclean, 2004). TVET systems are therefore moving from supply-driven teaching to demand-led learning. Teacher capabilities and teacher education are key to these TVET reforms. If teaching and learning are to be effective in these shifting paradigms, it stands to reason that a well educated, committed and effective teaching workforce is essential. In many societies, the role of 'teacher' remains an esteemed one. In others, it once was, but it has become increasingly more difficult to interest and recruit, and even retain teachers for a variety of reasons. As we have already pointed out this is in part because vocational educators have often been perceived (and see themselves) as 'second class' to those teaching in more 'academic' content areas.

Research has found that such pressures on vocational teachers are often a significant factor in reported high levels of teacher attrition (Self, 2001). In a small-scale study in Ohio, career and technical teachers reported higher levels of role and task stress than academic teachers (Kerlin, 2002). In Australia, strong concerns of technical and further education teachers were pressures in the current environment and doubts over their capacity to maintain professional standards and provide quality education (Kronemann, 2001).

In addition in many countries the TVET teaching workforce is aging (Grootings & Nielsen, 2005; de Rooij, 2005; Guthrie & Loveder, 2007). Severe shortages already exist and vacancies are difficult to fill as work in their own vocational area may be more rewarding. This makes it difficult for TVET institutions to meet their obligations to learners, industry and society more generally if they have problems recruiting and retaining a committed and high-quality staff. In addition, the TVET workforce may be highly casualised (as it is in Australia) and casual teachers tend to be less engaged with the TVET institution in general and their other teaching colleagues in particular. It also may affect how integrated the learning experience is for the learners if all staff, including those who are casual, are not involved in developing a shared understanding of how an appropriate and integrated set of approaches to teaching and learning will be provided to learners.

So what teaching capabilities do TVET teachers require to be effective in a changing context? In Australia, the *Enhancing the capability of the VET professional* project in Australia (Dickie et al., 2004) draws the following areas of skill for TVET teachers from the material they reviewed:

- Pedagogical expertise. This includes the capacity to adapt learning and teaching strategies to suit individual learners, pedagogical understanding and access to a range of learning theories and techniques. Increasingly it will also involve understanding and applying new pedagogical approaches including coaching, mentoring, and facilitating learner-centred, self-directed learning, and learning (often just-in-time) at work
- Learner focus. Some studies identify learner focus as a specific capability. This includes the ability to promote and support self-directed learning, as well as to

cater for individual learning differences, and enable lifelong learning. However, a learner-focused approach is not the same as learner-centred learning in which the TVET teacher is but one of a range of resources available to the learner

- Client orientation. This involves brokering and relationship-building skills, to enable teachers to provide advice to clients (including learners and enterprises), establish and maintain relationships, network with industry, develop partnerships, customise training and delivery to meet client needs, and evaluate and monitor outcomes
- Industry currency. Vocational expertise in the teacher's subject area is as critical as pedagogical expertise. This is particularly important as it is highly valued by employers and learners alike. However, increasing demand for generic skills by employers means that teachers need to be able to balance delivery of technical and industry specific skills with generic employability skills
- Use of technology. This covers knowledge and expertise in using new and emerging technologies, in particular to stay in touch with and advise learners, as well as for flexible delivery. These skills are also important to enable TVET teachers to 'stay in touch' with each other, including via communities of practice and other networks, and can help to combat the isolation many teachers experience
- TVET system expertise, that is knowledge of the system and how it works
- Personal qualities and attributes. Personal attributes are identified as being absolutely critical for all TVET teachers. Communication skills, a commitment to self-development, a capacity to deal with change, self-directed learning, managing time and managing knowledge are all seen as important.

Given these capabilities, one key issue is the initial preparation and ongoing development of TVET teachers. There is a strong push internationally for teachers to demonstrate increased professionalism, demonstrate high level of discipline-specific and teaching skills as well as an ability to understand the needs of industry and operate in an increasingly competitive environment where business acumen is as important as pedagogic skills.

In a number of countries, though, TVET teachers, in terms of content knowledge, have a purely theoretical vocational background and lack the practical and work-based vocational experience expected in a number of other TVET systems. This hampers their ability to understand what their learners will face in the real world of work and prepare them for it. It also hampers their ability to engage productively with local industry to address their needs. On the other hand, while university studies, especially in education, are often sought - and may be a requirement for promotion above a certain level - the picture is not clear. In Australia, for example, the heavy cost of frontend and university-based teacher training for those entering the TVET system after sometimes extensive experience in the workforce became burdensome. Consequently, lower level, but arguably inferior, initial qualifications were substituted as minimum requirements for vocational teaching practice. Interestingly however, the pendulum appears to be swinging back to the need for a higher level of initial 'educational' qualifications to teach. A number of large TVET providers offer teacher training in their own right, or in partnership with universities. Some also have arrangements encouraging their staff to pursue higher level studies in their vocational area, in education or in business studies. The UK, for example, is currently redeveloping its vision for the further education sector, including the workforce development of all its staff from principals to support staff to build a 'world class FE system to meet employer and learner needs' (DIUS, Department for Innovation, Universities and Skills, 2007, p. 47; see also DfES, Department for Education and Skills, 2004, 2006).

What is needed to ensure that TVET teachers are as effective as possible is an ongoing commitment to their professional development. This means not just formalised approaches – important though they are – but also having a learning-conducive environment within the TVET institution itself which encourages reflective practice and fosters a learning culture within it. TVET teachers rely extensively on experiential or 'on-the-job' learning that occurs are part of their work. It is important therefore, that attention is paid to the extent to which their work is conducive to learning – that is, the ways in which work is structured and organised in order to afford teachers' opportunities for ongoing professional development. It is through the organisation of work that teachers can be provided with opportunities to expand their repertoire of teaching skills, experiment with innovative teaching methods and build networks and partnerships both within and outside their institution in order to foster authentic environments for their learners. In this way TVET staff are actively involved in maintaining and developing not only their individual expertise but also their institution's organisational capability (Harris, Clayton, & Chappell, 2007).

A final aspect that bears on teachers' effectiveness is their degree of freedom from centralised controls so that teaching and learning decisions are made in the interests of their clients and to meet local needs. In Europe, there has been a move to decentralise in the past 10–15 years (Grootings & Nielsen, 2005). An issue is that there can be a difference between rhetoric and reality of their freedom to act, that is the extent to which teachers are actually free, or FEEL they are free, to act professionally and in the best interests of their clients.

Some Brief Conclusions

The one key element evident globally in TVET is change. Changing work practices and the changing needs of societies in general need to be supported by vibrant and strong TVET systems. This requires a re-appraisal both of the ways in which vocational skills are taught and learnt, and the skills needed for those who are charged with teaching them. These re-appraisals are particular to the needs of individual countries and cultures, and their traditions of learning. Many developing countries and younger booming economies (such as China and India) are recognising the importance of TVET programmes to their national development. They are looking to those more developed TVET systems and their approaches to inform the development of their own approaches, but adaptation is required if they are to be successfully incorporated into their own teaching and learning traditions. Approaches to teaching and learning which have served more mature TVET systems well, but have since been overtaken by newer thinking, may therefore still have practical relevance in these newer TVET systems.

In respect of TVET teaching a number of conclusions are evident for TVET institutions and teachers. They need to:

- be as close as possible to the industries and enterprises they serve
- remember their social responsibilities, where appropriate, and their responsibilities to individual learners and communities
- shift their focus from teaching to learning
- be flexible in the TVET programmes they provide and base them on a broader conception of competence.

In addition:

- TVET teachers have to be seen and acknowledged as the professionals they are given their crucial role in sustaining and developing the skills of their nations' workforces, and this means that their status and levels of reward in some societies need to be addressed
- TVET teachers need to play a key part in any reform process. In many countries they have been excluded from this process, and this has been to the detriment of the changes desired by other stakeholders
- TVET systems need to be continually mindful of how policies and practices are changing in other countries and cultures so that they in the best possible position to appraise and adopt good practices.

Biographical Notes

Hugh Guthrie holds master's degrees in both science and education. He has been a university academic and a member of staff in the Technical and Further Education Division of The RMIT University in Melbourne, Australia.

Hugh has worked at the National Centre for Vocational Education Research (NCVER) in a variety of research and management positions since 1987.

He has a wide range of research and professional interests, including vocational needs analysis; curriculum and instructional design; teaching, learning and assessment in TVET and TVET workforce issues.

Roger Harris is a Key Researcher in the Centre for Research in Education, Equity and Work, University of South Australia. He has had extensive experience in TVET teacher education and particularly research, focusing on many aspects of national training reform and publishing widely in this field.

His recent research has been about workplace trainers, VET staff development, VET professionals' work, apprenticeships, learning cultures, workplace learning, private training providers, and inter-sectoral student movement.

He is Editor of the *Australian Journal of Adult Learning*, and Director of the national research consortium on Supporting VET providers in building capability for the future.

Michele Simons is employed as a Senior Lecturer and Researcher in the School of Education at the University of South Australia. She has extensive experience in the initial preparation and ongoing professional development of teachers for post compulsory education settings including TVET.

Michele has completed a number of research studies on the professional development of teachers and trainers in the VET sector, the role of TVET teachers in apprenticeships and traineeships and ways of assisting TVET teachers to work in industry.

Tom Karmel took up the position of Managing Director, National Centre for Vocational Education Research in August 2002. Prior to this position he held senior appointments in the Federal government areas of education, employment, labour market research and the Bureau of Statistics.

His research interests have centred on the labour market and the economics of education and has a particular interest in performance indicators both in higher education and vocational education and training.

Currently, President of the Economics Society of Australia, South Australia branch.

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TEACHING STUDENTS WITH SPECIAL NEEDS

Bruce Allen Knight

What Does Special Needs Education Mean?

"It is clear that in an international setting the use of the term 'special educational needs' leads to confusion because it means different things for different countries" (OECD, 2005, p. 12). Inclusive education is today more broadly defined as a reform that supports diversity amongst all learners (UNESCO, 2001). Its aim is to "eliminate social exclusion that is a consequence of attitudes and responses to diversity in race, social class, ethnicity, religion, gender and ability" (Ainscow, 2005, p. 109).

For this chapter then, the term will be used to include students with difficulties in learning, students with disabilities, students whose first language is not English and those who are disadvantaged and thus require resources such as specialist personnel and materials so that they can access the curriculum more effectively.

The focus of this chapter is on teaching students with special needs but first to put this into perspective it is necessary to outline the complexity of needs and behaviours of students and then to briefly review the way in which governments implemented policy and how students with special needs were taught in the past.

Supporting Student Diversity

In the UK, the term "special educational needs" covers a wide range of difficulties. The 2001 Special Educational Needs Code of Practice: "does not assume that there are hard and fast categories of special educational need [as well as] recognizing there is a wide spectrum of needs that are interrelated ..."

The discourse of inclusion now stretches to include many different groups. These categories identify the teaching adjustments that are made in a class/school program to provide an inclusive education for students. Common categories that now exist worldwide include: specific learning disability, severe learning difficulty, profound and multiple learning difficulty, emotional behavioural disorders, speech language disorders, hearing impairment, and so on. Traditionally, the different terminology used results from a model of defectology (categories of disability) (OECD, 2006). However, the discourse has now been broadened to include the following areas:

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- Indigenous education.
- English as a second language learners (for students who are learning English as a second language who may be newly arrived immigrants or refugees).
- Gifted and talented education (options include early school entry, acceleration and enrichment).
- Rural education (to engage with the challenges of delivering education in rural areas as well as engaging with the social and economic changes that affect students in these areas).
- Socio-economically disadvantaged students (funding to assist students to improve educational outcomes).
- Children and young people in the care of the state.

Two other areas relating to teachers that have received a great deal of media attention relate to students who present with challenging behaviours and students who have mental health issues.

Students with Challenging Behaviour

Students with emotional or behavioral disorders have historically experienced poor school outcomes compared to other students with and without disabilities. United States statistics on challenging behaviours appear similar to those in the United Kingdom and Australia (Queensland Teachers' Union, 2005).

In a 2005 New South Wales State School survey of 2,616 students in Years 8 and 9, the NSW Bureau of Crime Statistics and Research (2005) reported a number of school-related factors were found to be associated with physical violence. Among this group of students, incidents were most common with teachers who had less than 5 years teaching experience and whose aims were to control behaviour rather than teach students. Research suggests that for this group of learners, effective instruction, consistent management practices, and the opportunity to acquire and utilize pro-social behavior management skills are important to deliver positive educational outcomes (Bru, Murberg, & Stephens, 2001).

Mental Health Issues

The expression "at risk" has, as Carroll, Baglioni, Houghton, and Bramston (1999, p. 378) point out, become a "catch all" phrase that encompasses not only children with academic difficulties, but also more specifically "those with severe behavioural and emotional disorders who are thought likely to fail to achieve their potential development in adolescent years". Within the category reported here, "at risk" refers to the physical, emotional and social conditions for individual well-being. These can include stressors and harmful conditions such as family and domestic violence, and emotional, sexual and physical abuse.

Child abuse is a significant social issue worldwide. Numbers of substantiated reports of child abuse in Australia, for example, were 27,367 in 2000–2001 (Australian Institute of Health and Welfare, [AIHW], 2002, p. 14). In June 2001

there were 19,783 children on care and protection orders in Australia (AIHW, 2002, p. 30). The rate of children aged 0–17 on care and protection orders per 1,000 children in Australia was 4.2% (AIHW, 2002, p. 34). Other children at risk include those in out of home care (e.g. foster care, residential facilities) currently estimated at more than 20,000 in Australia (Cashmore, Higgins, Bromfield, & Scott, 2006). For these children and young people, separation from family can "destroy peer and other social relationships, shatter already fragile trust in the permanence of relationships with adults, evoke memories of earlier separations and encourage emotional disturbance and learned indifference" (Commission for Children and Young People and Child Guardian, 2006, p. 4). Children in these circumstances may be affected in their academic work and social interactions with their teachers and peers.

In many underdeveloped countries, at-risk also includes school dropouts, orphans, street kids involved in illicit drug trafficking, lack of family interest in education and students' poor health.

C. Knight (2007) suggests the establishment of an agreed national approach through the Australian National Safe Schools Framework (Ministerial Council on Education, Employment, Training and Youth Affairs [MCEETYA], 2003) is another indication that issues such as prevention of family and domestic violence and child abuse and neglect are government priority issues that require a combined professional approach.

An agreed national approach to help schools ensure the wellbeing of all Australian students is provided in the National Safe Schools Framework (2003). This framework was developed by a taskforce established by the Ministerial Council on Education, Employment, Training and Youth Affairs of the Australian government (MCEETYA, 2003). In particular, it aims to help schools and their communities address issues of bullying, harassment, violence, and child abuse and neglect.

The National Safe Schools Framework policy (MCEETYA, 2003) in establishing its context states that it presents a way of achieving a shared vision of physical and emotional safety and wellbeing for all students in Australian schools. The Framework recognizes the need for sustained positive approaches that include an appreciation of the ways in which social attitudes and values impact on behavior of students in our school communities.

This discussion has shown that there is a wide diversity of students in a contemporary world who have a range of learning/teaching needs because of their circumstances. The following section outlines how the education of students with special needs have been met in the last 50 years.

Changing Times in Education for Students with Special Needs

To better understand the educational needs of all students and to cater for their needs in classrooms, it is important to briefly examine educational changes over the last 50 years.

Educational Change Through to the 1960s

Teachers were in "control of knowledge" with the educational system perpetuating itself. Tradition and textbooks were the guides and teachers adapted to the context. Students with special learning needs were those who were segregated into separate institutions based on the results of an IQ test. All other students were treated as a whole group.

Mid-1960s-Mid-1970s

There was a recognition that change was necessary and there was a concern over the quality of teaching and there was pressure to do something different. This was the time of curriculum-based reform with teaching programs viewed as being too abstract and too radical a change from previous practice. The progressive movements of the time were perhaps too abstract and too ambitious in challenging traditional practice. The school structures and culture were the same, but the pedagogy and assessment were not related, sending a signal to authorities of the need for "back to basics". Students with special learning needs, identified after being tested, were sent to specialist schools (covert discrimination with school cultures being regarded as negative and depressant).

Mid-1970s Through to the Mid-1990s

This period saw a return to the back to the basics movement so as to "restore" education systems to their former glory where students were taught basic skills. It was promoted that change was more likely if teaching was made more explicit and highly controlled reading programs such DISTAR were popular. The critical elements of accountability and monitoring were added to the school management systems. During the 1980s, integration of students with special needs into regular classes was promoted. Integration offered a continuum of placements and was based on the assumption that students with disabilities may need alternative placements to learn effectively. Settings included a full range of educational placements such as special schools, special classes in regular schools, and integrated regular classes.

This period saw a gradual increase in the number of students with special needs (mainly those with mild intellectual disabilities and slow learners with low support needs) retained in regular classrooms (rather than transferred to specialized institutions). Although integration gave students and their parents the right to an education in a regular school setting, schools could still refuse entry if they could demonstrate that they could not cater for a student's needs. Teachers working in a regular school at this time may not have had contact with any special needs students excepting those with learning disabilities or learning difficulties who were already in their classes. Alternatively, a regular classroom teacher may have had a special needs student integrated into his/her class for particular subjects and times if a special class was located on the same site or arrangements could be made to bring the student to the school. The use of these settings suggested that the student needed to "fit" back into the regular education system.

Mid-1990s to Current

The response to supposed declining students' literacy levels prompted governments to fix education systems (with the implication that this will also fix instruction). There was a belief that there was a need to change the context and improve teaching by having smaller class sizes, developing standards (benchmarks) of performance, and using mandatory testing. Other changes to the educational context included focusing on decision making responsibilities and altering the relationships between major players (such as the "Department" bureaucracy) by introducing site-based management for school principals. However, the status of catering for students with special needs didn't immediately change. During this period we have now seen a change from integration toward inclusion and as indicated earlier, a stretching of the discourse to include different groups of students with special needs. Currently in the education sector there is pressure to transform educational institutions, rather than improve or reform them (Hargreaves, 2003).

At all levels, the search is for drivers for changing the existing models, rather than merely repairing system mismatches between practice and reality. The strong message is that new times need new solutions. These pressures in most cases are gentle but unrelenting forces on teachers and administrators to change the ways in which the seemingly timeless business of education is done. Yet, the conventional models seem to persist. (Ministerial Advisory Committee for Educational Renewal, 2004, p. 11)

So, rather than integrating students who have special needs, the schools need to identify what students need to produce positive learning outcomes. Such an inclusive culture promises an energizing, socially just educational system.

Prevalence

It is not known how many of the world's population lives with a disability as well as what are the circumstances of their lives. The most widely cited statistic is the World Health Organisation (WHO, 1981) estimate of 500 million with impairments or disability. WHO (2003), using the same 10% prevalence has updated this figure to 600 million to confirm world total population growth.

Thirty-six percent of the world's population is iodine deficient (World Health Organisation, WHO, 2004), and this is the single largest cause of severe intellectual disability (and is largely absent in developed countries) (Hetzel, 1993). Other causes of intellectual disability include malnutrition, alcohol use and infectious diseases. Regardless of severity of disability, the intellectually disabled group experience higher rates of unemployment and therefore has greater exposure to poverty (Fujiura, Park, & Rutkowski-Kmitta, 2005).

The Students in Their Twenty-First Century Classrooms

In 2007 in any developed country in the world, a class of 25 students in an elementary school would "typically" contain a number of students who have different learning needs.

For example, there would be a group of five or more students who complete all the subject area tasks effortlessly and therefore require extension and enrichment activities to ensure that they are appropriately challenged. In any class there will also be a solid core of perhaps fourteen "average students" who can usually complete assigned tasks with minimal teacher assistance. There will be a small group of students with learning difficulties who struggle with all tasks and need constant teacher assistance. There could also be one or more students who are slow learners and who may have been ascertained as having an intellectual disability and who generally need teacher aide assistance to complete any work. With this group of students, these are only their academic needs, and there are many other factors which also influence their learning. For example, three or more students may exhibit behaviors such as non-conformity and non-compliance with teacher direction and display aggressive behavior to their peers. Other students will come from homes where English is a second language, and on current statistics, half of the students will come from single parent households and one student could be clinically depressed requiring medication. As you can see, a single classroom can be a very complex place. The following vignette illustrates the complexity of one individual student's special educational and other needs.

Vignette

Saleem is an 8-year-old boy newly arrived into Australia with his refugee family from Africa. Because English is not his first language it is difficult to assess his skills but he is not performing at the grade level in which he has been placed with his chronological peers. Saleem, who has Down Syndrome, can communicate but after 2 months at school has no friends his own age but rather spends most of his time at school with older students from another refugee family. Other considerations are that he is HIV Positive and has severe emotional issues because of previous events in his drought-ravaged birthplace. This all has challenges for Saleem, his classmates, his parents and the parents of his classmates, the classroom teacher, the school administration team and the wider school community.

As Ainscow, Booth, and Dyson (2006) indicate, the challenge to produce positive learning outcomes for students such as Saleem will involve overlapping development to "reducing barriers to learning and participation for all students; as increasing the capacity of schools to respond to the diversity of students in their local communities in ways that treat them all as of equal value; and the putting of inclusive values into action in education and society" (p. 297). The current preferred philosophy of inclusion and what this means for teachers in meeting the needs of special education students in classrooms will now be discussed.

Inclusion: The Philosophy

Many writers contend that inclusion is not an entity but rather a set of core values (Coles & Hancock, 2002) while others suggest it is a process (Hornby, 2002). "It is

perhaps useful to define inclusion as a catalyst that requires schools and society to identify and overcome the barriers that inhibit children's choices and ability to achieve their full potential" (Hodkinson, 2005, p. 18).

It appears that for many teachers inclusion is not clearly conceptualized. It has been contended that some teachers believe that not all children are capable of being included in the mainstream, and even though a majority of teachers support the concept of inclusion (at least for students with sensory difficulties or mobility problems) the support doesn't include those with severe intellectual problems or those with emotional/behavioral difficulties (Croll & Moses, 2000; Scruggs & Mastropieri, 1996). Some argue that classroom practitioners should provide support with specialist input as needed, others preferring that specialists work directly with students whilst others argue that specialist facilities are needed (Florian, Rouse, Black-Hawkins, & Jull, 2004).

One teachers' union strongly endorses the principle of "the most advantageous environment", implying a recognition and acknowledgement that certain students, for brief or extended periods, require educational programs not provided by teachers with regular training in a regular setting (Queensland Teachers' Union, 2006). Cook and Schirmer (2003, p. 139), support this notion and claim that, "at its essence, special education should fulfil three criteria to be considered efficacious and truly special: a range of teaching practices that have been shown to work for students with disabilities must have been developed; those effective practices must have been implemented with fidelity; [and] the effective practices must in some way be unique to special education; that is, they could not be used as well or as frequently in the absence of special education".

The philosophy of inclusion predicts that all students are accepted into an educational culture within their local neighbourhood with age and grade-appropriate placements. All decisions are based on the best that can be done for each child without an overdependence on paraprofessionals. What should be occurring is shared credit and responsibilities with other professionals such as specialist teachers, support teachers of students with literacy and numeracy difficulties, speech pathologists, physiotherapists, school counsellors etc working together with students and their families.

Government Policies on Inclusion

The negative effects of segregating students with special needs, together with concerns about the rights of all students led to an international commitment to inclusion evidenced by UNESCO's (1994) Salamanca Statement on special needs education. "Schools should assist children with special education needs to become economically active and provide them with the skills needed for everyday life, offering training in skills which respond to the social and communication demands and expectations of adult life" (UNESCO, 1994, p. 10). This seminal paper outlined that education systems needed to cater for a wide range of student abilities in the regular classroom in order to meet their needs.

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Paragraph two of the Salamanca statement (UNESCO, 1994, p. 2) discusses the "rights" of every child to an equal education:

We believe and proclaim that: every child has a fundamental right to education, and must be given the opportunity to achieve and maintain an acceptable level of learning; every child has unique characteristics, interests, abilities and learning needs; educational systems should be designed and educational programs implemented to take into account the wide diversity of these characteristics and needs; those with special educational needs must have access to regular schools which should accommodate them within a child-centred pedagogy capable of meeting these needs; regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society, and achieving education for all; moreover, they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire system.

Most countries now refer to international documents such as the Salamanca Statement and the Framework for Action of the World Education Forum in Dakar (UNESCO, 2000) in their policy papers. These statements support the notion that education in regular schools is the most effective means of combating discriminatory attitudes and thus building an inclusive society.

In some countries in South-East Europe, for example Bosnia-Herzegovina, Bulgaria, Croatia, Kosovo, FYR of Macedonia, Moldova, Montenegro, Romania and Serbia, they have "only recently started to pay full attention to education for children with special needs and the concept of inclusive education" (OECD, 2006, p. 9). A process of integration of children with special needs is underway and being organized through special schools, special classes in regular schools and integration of children into regular classes (countries differ on numbers of children and level of integration). Some countries (e.g., FYR Macedonia) have special institutions for abused children, orphans and children with "psychological problems" (OECD, 2006, p. 12).

Ainscow (2005) outlines the elements of special needs education as a process which is about how to learn with and from difference. He states that special needs education is concerned with the identification and removal of barriers and is about the presence (where), participation (quality of experiences) and achievement (outcomes) of all students. The emphasis is on learners who are at risk of marginalization, exclusion or underachievement. Teachers need to be flexible to cater for the diversity of learners' needs through such things as appropriate programs, explicit pedagogy, classroom organization, resources and other adaptations that are necessary, all requiring significant changes to previous thinking and practice. This is different to the thinking evolving from a deficit model where teachers blame students for not performing and suggesting for example that there are going to be problems with these students because they come from a certain neighbourhood or from single parent families or English is not spoken at home and so on.

Inclusion: School Policy

It is important that a school develops a policy to provide an environment that is inclusive of students' values, norms, and traditions. Hanko (2003) asserts that a school ethos needs to be developed which enables students and teachers to be supported and thus structures need to be set up that support them as they bring about changes in their thinking, attitudes and inclusive practices. A policy should detail how needs will be met and the strategies that will be used to implement inclusion so as to ensure that inclusion is highly visible in classroom practice. Parents, teachers, school administrators, specialists and other major stakeholders from the wider community need to be involved in the planning, monitoring and evaluation of such a policy. Frederickson and Cline (2002) suggest that schools become more inclusive when pupils participate in and connect with their school community.

Giorcelli (2004) has suggested that inclusion has delivered under-prepared schooling systems, unsupported placements, traditional curricular approaches and a reliance on para-professionals. Therefore, the following issues must be addressed when discussing inclusive practices as part of school policy. Firstly, there is a strong need for regular and special education teachers to work together so that all students' needs are addressed. Secondly, it needs to be stated how active participation by the students will be encouraged. Thirdly, policy will need to outline what support will be available to students and to staff. Finally, it is essential that the policy outline how the school will monitor the capacity of staff to deliver services and the effectiveness of programs for students.

Inclusion: The Practice

The ideals of inclusion are difficult to put into practice. Scruggs and Mastropieri (1996), Forlin (1998), B. A. Knight (1999, 2000, 2001, 2002, 2007), Knight and Knight (2004), and Stephenson (2003) have reported that the practice of inclusion makes considerable demands on teachers, which is why a supportive school policy is needed. It is widely recognized that there has long been an imbalance between the demand for special education teachers and the supply of them, thereby resulting in serious shortages (Boe & Cook, 2006).

For special needs education to work effectively, the following basic tenets must be accepted. Of prime importance is the fact that teachers accept responsibility for managing students' with special needs and their learning (B. A. Knight, 2007). Students with special needs require explicit teaching and this will be discussed in greater detail later in the chapter.

Collaborating with other professionals and specialists is essential for facilitating inclusion. This supportive culture not only means meeting students' academic needs, but also linking services to other significant social contexts through working with specialists that help families to establish a home environment that is safe and where basic needs of the students can be met. Stable environments at school and home are essential as it has been reported that up to a quarter of all students have mental health problems before the age of 18 (Sawyer et al., 2000).

Explicit Teaching

After a coherent policy of inclusion, together with supportive mechanisms of collaboration of personnel and support of teachers and students is developed, it is essential to explicitly teach students.

"In contrast to teacher-directed methods of teaching there is strong evidence [*e.g.*, *Center*, 2005; *Farkota*, 2005; *Swanson & Deshler*, 2003; *Westwood*, 2004, 2006] that exclusive emphasis on constructivist approaches to teaching are neither initially nor subsequently in the best interests of any group of students, and especially those experiencing learning difficulties" (Rowe, 2006, p. 1, italics added). Students with special needs do not develop skills incidentally, but rather need to intensively learn skills so that they can be applied in new learning situations. One State education policy in Australia now indicates that "all students are provided with the explicit and scaffolded teaching they need for success in schooling and beyond" (Education Queensland's Inclusive Education Statement (2005, p. 3). Such explicit teaching using a variety of modes also actively involves students in the learning process and is dependent upon each individual's abilities and the learning context (B. A. Knight, 2005).

Effective teaching practices for students with special needs, will now be discussed. Firstly, it is important to make the intent of activities clear to students. Good teachers clearly outline the purpose of an activity, the outcomes expected and the criteria on which the output will be assessed. For example, in a mathematics activity in a year 2 classroom, you as the teacher might require that a small group of students complete 10 items instead of 20, as you know that this group will require concrete objects to complete the calculations as they do not have 1:1 correspondence of number.

Goals and expectations need to be negotiated with students. As their teacher you have an accurate idea of students' capabilities and standards of work. It is important that outcomes can be realistically achieved and this may involve you in task analysis (that is, breaking down the components of a task into smaller achievable sub-tasks). This works well for students who may lack persistence for longer-term tasks such as the completion of a science project which contains clearly identifiable components that culminates in one large body of work.

A wide range of teaching approaches is necessary. Not all learners will be visual and may need to access other senses to learn effectively. For example, learning to handwrite may involve some students in tracing over sandpaper shapes with their finger so as to feel as well as see the handwriting process.

The use of contingency shaped learning, where outcomes relate to the student's behaviour can be used to reinforce learning. Students need to make the explicit link between the effort they put into a task and the result they achieve. For example, researching a topic for an English oral presentation involves more than "googling" information and copying and pasting. Such a quick-fix approach deserves the result of fail of the task and the reasons for this need to be clearly outlined to students.

There is a strong need to explicitly teach strategies to students. Working memory can be enhanced by teaching students to use them efficiently, thus allowing them more time to concentrate on solving the problem. This is achieved by firstly teaching what the strategy is, how to use the strategy and when to use it. For example

R	Read	Read the problem to yourself
0	Organise	Organise the information contained in
		the paragraph. What is important? What
		do I deal with first?
<u>S</u>	Select	Select the appropriate operation. Add?
		Subtract? Divide? Multiply?
<u>E</u>	Estimate	Estimate the answer you might get
<u>S</u>	Solve	Solve the problem

Fig. 1 The ROSES strategy

(see Fig. 1) the strategy "ROSES", (Knight, Paterson, & Mulcahy, 1998, p. 36) is a strategy that helps students systematically solve mathematical word problems by changing the words into number sentences.

For students to effectively use this strategy, they must understand what each letter of the mnemonic means as well as be able to read and estimate and so on. The problems given must be able to be solved by the students using previously mastered techniques.

Guided practice is essential for students to understand process and content. A challenge for teachers is to present content to students in which they have no interest. It is necessary therefore to generate work that is meaningful and helps them to be selfmotivated. This is known as the Don Bradman Effect (B. A. Knight, 2007) where the greatest ever cricket batsman, Sir Donald Bradman underwent many long hours of practice to become the best as he was self-motivated to do it. For example, to teach students to use scissors requires lots of repetitive work but this can be creative when used to construct shapes from templates related to students' personal interests.

Resources and materials may need to be modified and instruction adapted for students. For example, any project work to be completed over a period of extended time cannot just be handed out and students told to get on with it. To be successful, students with special needs in particular have to be explicitly taught the skills of planning (e.g., drawing up timelines, provided with ready access to resources), the implementation (e.g., how to find relevant information and complete the task) and criteria for them to judge the work they put into the project (e.g., what they did, how they did it and the result they got) (Knight, Graham, & Bellert, submitted).

Finally, teachers need to closely monitor students' progress as gains may be small. For example, by frequently completing running records on students' oral reading (Dunn, Knight, & Axtell, 1993), teachers can build up an accurate representation of students' reading behaviours and by analysis determine what skills need to be taught.

Conclusion

The number of children with special needs is ever increasing. Globally, factors such as poverty, malnutrition, iodine deficiency, increasing survival rate of premature babies, the number of infants being born with AIDS, the increasing numbers of infants affected by Foetal Alcohol Syndrome and other drug dependencies, increased life spans for people with muscular dystrophy, the increasing number of students suffering mental health problems, and the cultural and social complexities of students living in multicultural societies, ensure that catering for students with special needs is going to be a priority in inclusive schools.

The philosophy of inclusion offers school communities a socially just framework to educate all students in a welcoming system. It is essential that the philosophy be supported with a school policy which provides supportive mechanisms for students, teachers and the wider school community. This includes such essentials as resources appropriate for students' needs (including human, technological and physical resources).

It is important that a culture that empowers the major stakeholders in the education process be established. Parents, teachers, specialists and students need to be involved in collaborative decision-making processes that enhance learning outcomes for all students. Such a culture supports the empowerment of all individuals operating in the environment, including disability awareness for all students in an inclusive school community. What follows is flexible management practices at the school and classroom level that support individuals in achieving outcomes.

At the classroom teaching level, it is important that teachers use explicit teaching so that skills are learnt, practiced, supported and applied to new learning situations. This teaching is a priority as it allows all students to work to their potential and achieve outcomes, which in some special needs cases, can change the economic and career paths of the individuals involved.

Finally, Harriss-White (2003, p. 1) reminds us, however, of the global reality of the impact of disability when he writes, "if measured by resources committed and by rhetoric, by the quality of analysis and by data availability, alleviating the conditions of being disabled is the lowest priority on state welfare agencies in practically all underdeveloped countries, arguably all countries".

Biographical Note

Bruce Allen Knight is Associate Dean (Research & Innovation) of the Faculty of Arts, Humanities & Education at Central Queensland University. He has extensive teaching experience in primary and special education and University settings having taught both in Australia and overseas. He has been involved in identifying, programming for and teaching students with special needs as well as conducting workshops and seminars for teachers and parents. He was elected a Fellow of the International Academy for Research in Learning Disabilities in 2006.

Dr Knight has co-authored/edited seventeen books, written 79 papers in scholarly journals and books, been the recipient of more than \$ AUD 3.5 Million in research grants, and presented more than 50 papers at national and international conferences. His current research interests include the inclusion of students with special needs in regular classrooms, and catering for students with literacy learning difficulties.

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TEACHING GIFTED AND TALENTED CHILDREN

Martina Endepohls-Ulpe

Introduction

Do gifted and talented children have special learning needs demanding differentiated scholastic curricula and instructional strategies? Placing this entry in a section about teaching specific student populations is an implicit positive answer to this question.

Not every instructional method is equally suitable for all students. For example there is evidence that a more structured instructional format may be more effective for younger or less intelligent students while an open instructional format seems to be more advantageous for older or more intelligent students (Heller, 2005, p. 193). Students with a quick learning pace, highly effective information processing capacities and memory skills often appearing in conjunction with high learning motivation and a vast thirst for knowledge will suffer from boredom and under-stimulation when they are instructed in undifferentiated, heterogeneous learning groups. Lack of challenging experiences and lack of sense of achievement will in the long run decrease or delete their motivation and affect their intellectual development. Even behavioural problems may occur.

As a consequence of this insight, a lot of programmes, curricula and materials have been developed in the last decades to meet the needs of extraordinarily bright and talented children. In spite of that fact we are still far away from a definite agreement about what the special educational strategies and curriculum contents for these children should look like. Scientists, educators and politicians are even debating about the target group that should benefit from these special measures. Hence prior to presenting a review of conceptions of teaching gifted children it is necessary to discuss conceptions of giftedness and their consequences on the process of identifying gifted children and on the notions of how they should be treated in the educational system.

Defining Giftedness

Definitions and models of giftedness and talent differ with respect to their narrowness or width, their perception of giftedness as something stable or dynamic and changeable,

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their emphasis on demonstrated performance and their consideration of social or cultural influences on the development and the definition of gifts and talents (for a detailed overview see Olszewski-Kubilius, 2003; Coleman & Cross, 2005). Changing and developing conceptions of intelligence have strongly influenced this field of discussion.

Lewis Terman, one of the pioneers in psychological research on giftedness, started the first longitudinal study on the development of gifted children in the beginning of the 30s of the last century. For him giftedness was determined by an IQ above 140 on the Stanford Binet Test. He saw intelligence as a consistent and stable trait that determined good performance at school and success in the vocational life.

Renzulli (1990) and his colleagues point out that in addition to intelligence, creativity and task commitment, respectively high levels of motivation are crucial for the creation of high quality products. Renzulli also prefers to speak of gifted behaviours and performances rather than gifted individuals and thus stresses the importance of achievement as a criterion of giftedness.

In 1983, turning away from the view that intelligence is a general and holistic trait that influences various kinds of behaviour, Gardner published his "theory of multiple intelligences". He postulates the existence of eight autonomous human intellectual competencies: linguistic, musical, logical-mathematical, spatial, bodily kinaesthetic, interpersonal and intrapersonal (knowledge of others and self), and naturalistic (scientific knowledge). This view of independent intellectual abilities that make individuals differ in various ways and let them show individual profiles of strengths and weaknesses has intensely influenced theory and practice of gifted education. Several models of giftedness as for example the Munich model (Heller & Hany, 1996) or Gagnés model (Gagné, 1999) refer to various kinds of innate abilities similar to Gardner's intelligences.

The famous Marland definition (Marland, 1972, cited in Coleman & Cross, 2005, p. 13) can also be subsumed here: "Gifted and talented children are those identified by professionally qualified people who, by virtue of outstanding abilities, are capable of high performance. ... Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination: (1) General intellectual ability, (2) Specific academic aptitude, (3) Creative or productive thinking, (4) Leadership ability, (5) Visual and performing arts, (6) Psychomotor ability" Psychomotor abilities were excluded from the definition later.

Gagné (1999) stresses the importance of training and learning in his theory. He sees giftedness as the appearance of exceptional abilities in childhood, which have to be developed by learning and deliberate practice and thus turned into what he calls "talents", that means high performance in a field of human activity as e.g. teaching, swimming, playing the piano and so forth. In their expert-performance approach Ericsson and colleagues (Ericsson, Roring, & Nandagopal, 2007) also see giftedness as a manifestation of developing talent over time. Persons can work towards expertise in virtually any area by conscious training over long periods of time.

Furthermore, several theories or models (Heller & Hany, 1996; Gagné, 1999; Mönks, 1987) see the process of developing innate abilities into high quality performance

or expertise as influenced by various non-cognitive personality traits, as for example self-confidence, achievement motivation, volition, interests and on the other hand by obstructive or facilitating factors of the material or social environment as e.g. family, peers, school or even accidental occurrences. Sternberg (Sternberg & Grigorenko, 2003) in his latest theory of "successful intelligence" brings up the importance of practical abilities for successful use of analytical and creative abilities.

Gardner as well as Sternberg (Sternberg & Grigorenko, 2003) and Ericsson et al. (2007) point out that the definition of giftedness or talents and their utility depend on social and cultural contexts – an ability that may be highly valued in one culture may be less important in another one.

Outlining the discussion about what giftedness is, it can be stated that there is a strong tendency to take into account more than mere intellectual abilities both in the process of identification and in the field of education. The process of transferring abilities into high performance, expertise, or even success in life, and the factors that influence this process more and more get into the focus of considerations. Giftedness is regarded as something that can and has to be developed. In a German longitudinal study of giftedness conducted by Rost and his colleagues (Rost, 2000) it could be shown that even IQ values may decrease if children live in an unfavourable social environment. Against this background the necessity of creating both supportive and challenging educational environments for gifted children to help them to develop their abilities becomes evident. Societies cannot afford the risk that the abilities of individuals that have the potential to play an important role in science, economics or politics get wasted.

Identification of Giftedness

The question if there actually is a need to make a diagnosis of giftedness has been some issue of discussion. Identification of giftedness as an end in itself does not bring any advantages either for the child labelled as gifted or for the social environment. But if measures of fostering or special programmes for a certain group of students shall be offered, it has to be determined if a child belongs to this group or not.

Depending on a definition of giftedness that is more or less broad, the process of identification gets more or less difficult and complex. Coleman and Cross (2005) call definitions of giftedness that include a variety of possible abilities "omnibus definitions" and criticize them as illusory because the questions of measurement concerning a good deal of the regarded abilities as for example creativity, practical abilities or musical abilities are not answered yet.

But even if we concentrate on identifying children with academic talent we have to face several problems. If we were only interested in academic performance we could use achievement tests as a criterion – which would exclude underachieving children from our target group. If we wanted to find children with outstanding intellectual potential, regardless of their performance at school, and use IQ scores as a measure of identification we would have the problem of the arbitrariness of setting a value where giftedness begins and "normal" intelligence ends. Furthermore, there are a

variety of intelligence tests that do not measure exactly the same abilities and hence do not come to identical results. There are tests that concentrate on logical reasoning e.g. the Raven Progressive Matrices tests or Cattell's Culture Fair Intelligence Tests while other ones like the Wechsler Intelligence Sales for Children also include verbal abilities or even general knowledge. Results of the latter are strongly influenced by education, socio-economic level or the fact of belonging to an ethnic minority. IQ measures and achievement tests in general tend to value factors which under-represent non-modal gifted students. Nevertheless IQ measures and achievement tests meet best the criteria of measurement with respect to objectivity, reliability and validity.

Teacher nomination is of great relevance in the field of identifying gifted students though the validity of this criterion is frequently put into question. For teachers good performance at school seems to be a central feature in their diagnosis of giftedness. They tend to overlook children with high intellectual potential performing at an average level, or a level even below average (Rost & Hanses, 1997). Besides, teachers tend to identify boys more frequently as gifted, than girls (Endepohls-Ulpe, 2004). That may be for the reason that boys' high performance is attributed rather to aptitude than that of girls or due to the general tendency of boys to behave in a socially less adapted manner and disrupt lessons when confronted with boredom and lack of challenge. It is not quite clear how social behaviour or non-cognitive personality traits of children in general influence teachers' diagnoses of giftedness. Both negative and extremely positive aspects of social behaviour appear as central elements in teachers' concepts of giftedness. Deliberate experience in teaching gifted children and training for identification seems to improve teachers' identification abilities (Endepohls-Ulpe & Ruf, 2005; Tannenbaum, 1983).

There are a variety of other criteria that can be adopted for identification, as e.g. check-lists or rating scales for teachers and parents, self- or peer-nomination or work samples. They all have their benefits and shortcomings (for a detailed discussion see Coleman & Cross, 2005; Heller, 2004). Heller (2004) concludes his survey by recommending step by step procedures of identification as e.g. Renzulli's Revolving Door Model or the five-step model ENTER developed by Ziegler and Stoeger.

Renzulli & Reis call their identification model "Revolving Door Identification Model" (Renzulli & Reis, 1994) as it provides the selected students with the opportunity of participation in a variety of enrichment measures and to "revolve into" specific creative productive experiences. A talent pool of 15-20% of high potential students of a school population is identified through various measures, e.g. achievement tests, teacher nominations, assessment of creativity, or work samples. Students are also observed in classroom and enrichment experiences to look for signs of advanced interests, high creativity or motivation. The authors call this part of the process "action information". High IQ scores automatically include a student so that underachieving students have a chance to participate in the enrichment programme as well. With the talent pool students, interest and learning style assessments are used. They may prefer to work and/or do better in projects, independent study, teaching games, simulations, peer teaching, programmed instruction, lecture drill and recitation or discussion (Renzulli & Reis, 2000, p. 370). Information on the learner's abilities, interests and learning styles are compiled in a management form called "Total Talent Portfolio" which serves as a base for decisions concerning enrichment activities and for career counselling.

This information base is periodically reviewed and reanalyzed. As a last step curriculum compacting is provided to all eligible students, eliminating from the normal curriculum portions of previously mastered content. Compacting is the precondition for participation in activities of the "Schoolwide Enrichment Model" (see below).

The name of the model ENTER is an acronym, composed of the first letters in the terms "Explore", "Narrow", "Test", "Evaluate" and "Review", each standing for one of five diagnostic steps in the course of the identification process (Ziegler & Stoeger, 2004). The aim of identification in ENTER is not to label an individual as gifted, but to determine a potential learning path, that can lead a person to high performance or even excellence (Stoeger & Ziegler, 2003). In the first three steps different types of data are collected, which have to be combined for a complete diagnose. The first step "Explore" is a form of screening procedure, a preselection of individuals in terms of the applied model of giftedness (which is not preassigned by ENTER) and the identification goal, e.g. talent searches, career counselling or guidance to special programmes for the gifted. Information on a child's possible talents, general performance levels and behaviour patterns is gathered by interviewing persons from his or her surrounding social system. "Narrow" means defining the talent domain and collecting information on other aspects of the personality, which are important for implementing talents in achievement by e.g. observations, rating scales, check lists and interviews. In the third step "Test" quantitative data concerning the identified talent domain and concerning factors that might be obstructive for achievement are collected by administration of psychological tests, achievement tests and/or observation. The steps "Evaluate" and "Review" assess whether or not the goal of the identification process was reached. "Evaluate" means the evaluation of the decision concerning the actual goal of the process, e.g. if the child was successful in a gifted programme or not. "Review" refers to the identification goal and the underlying model of giftedness themselves. Maybe the goal of identification did not suit the person or the applied model did not include relevant factors to explain the development of excellence.

Step by step models such as the "Revolving Door Identification Model" or "ENTER" best meet individual needs of gifted students and minimize the danger of incorrect identification. Eventually the means of identification have to fit the procedures or programmes that shall follow them. A combination of criteria definitely makes a better diagnosis possible than a single criterion.

Gifted Children and Their Instructional Needs

There has been some debate about the question as to whether or not education and instruction of bright children should focus on the fostering of strengths or compensation of weaknesses. Feldhusen (1985) points out that beyond their special needs concerning a cognitive intellectual furtherance gifted children have special social needs. Their intellectual development and their emotional and social development may be asynchronous and being different from their peers in that way may cause problems for their social integration. The process of fostering gifted children hence should consider their whole personality and compensate deficits in certain areas of personality or achievement.

Definitions or models of giftedness in general rarely provide us with any instructional models for teaching gifted children. There are numerous attempts at specifying the characteristics of gifted students, but most of them are not systematically derived from empirical studies nor collected in terms of constructing a broad model of instruction (for a detailed discussion see Heller & Hany, 1996). Features of gifted children frequently cited in literature that are related to their learning abilities are e.g. special skills of knowledge acquisition, high speed of perception and processing of information, and high speed of learning.

At that time it is not clear if there are any qualitative differences in thinking skills between gifted children and children with average abilities. Nevertheless, as Heller and Hany (1996) point out, it seems plausible that taking up knowledge faster leads to a more broad and complex knowledge base which in turn may lead to qualitative differences in problem solving.

As Gruber and Mandl (2000) point out there are two aspects of learning that have to be considered when analyzing the process of acquisition of expertise: individual mental constructive activities and the social context of learning. The former should, instead of just passively receiving, be promoted by actively handling information, e.g. by presenting complex and motivating problems in which learners perceive relevance and by using multiple perspectives on the same subject matter. Heller (2005) refers to discovery learning as an instructional environment that enables the student to engage actively in the knowledge acquisition process. This may occur by (1) leaning through example (2) learning through experimentation or (3) learning through the resolution of conflict. A social context of learning that promotes the development of expertise should, as Gruber and Mandl (2000) suggest, provide expert modelling, possibilities of active observation, and guidance by more able partners.

The need for gifted children to acquire skills for active and independent learning is frequently emphasized. That is on the one hand because independent learning should be the ultimate goal of instruction in general and on the other hand, when the process of instruction becomes more differentiated and individualized, teachers get more difficulties in conducting the learning process of a single student and gifted students have to be able to manage their own learning process independently.

Heller and Hany (1996) suggest that the process of education for gifted children should proceed according to the following three principles: (1) passing through the regular curriculum as fast as possible, (2) acquisition of learning skills that are necessary for independent learning and (3) thus getting time and opportunities to pursue their special interests.

Basic Principles of Gifted Education

Acceleration and enrichment, Paula Olszewski-Kubilius (2003) calls them the "corner stones" of gifted education, are two basic principles of differentiation frequently applied in gifted programmes as well as in measures for individualized differentiation. Besides both forms of differentiation can take place in heterogeneous or homogeneous ability groups.

Acceleration means passing the normal curriculum faster than other students. In its narrowest sense acceleration is just applied to a specific course which is completed in less time than expected. In a broader sense acceleration allows children to move faster to a higher level of the educational system and enter a career earlier. Individualized organizational forms of acceleration are early admission to certain levels of schooling e.g. primary school, college or university, and grade skipping. Both options are not frequently adopted because of obstacles in form of schools' regulations or laws that differ from country to country and secondly as an international phenomenon due to parents' and schools' fears of adverse effects on the child's social and emotional adjustment. In spite of the students found in empirical studies seem quite positive (Rogers, 1991; Lautrey, 2004). Coleman and Cross (2005) suggest the early classes of elementary school as the best time for grade skipping or alternatively transition points in the educational system, e.g. between elementary and secondary level.

Grade telescoping is usually used as a group measure of acceleration for students who are generally gifted at the secondary school level. A class of talented students is formed that passes through the curriculum of all subject areas in 2 instead of 3 years. As an individualized measure telescoping may be limited to a certain subject by attending special courses, or attending university courses while still absolving the normal curriculum in other subjects. Telescoping may minimize any social misalignments because students stay in groups of peers of the same age most of the day.

In his overview of research on the effects of acceleration Lautrey (2004) concludes that children in accelerated programmes performed as well at the end of the programme as gifted children did who passed through the curriculum in the scheduled time. On the other hand, gifted children who passed through the curriculum as usual reached the same level of performance at the end of their programme as the accelerated children did. He raises the question of the benefits or possible disadvantages that the fact of having gained 1 year may have for the children.

A possible benefit of saving time in the educational system can be *enrichment*. Enrichment "extends, supplements, and sometimes replaces aspects of a school's structure. The emphasis in enrichment is generally to keep children with their peers and to foster the development of higher cognitive and affective processes" (Coleman & Cross, 2005, p. 270). The student works on problems or materials that are not part of the regular curriculum or regular subjects of the curriculum are extended. Enrichment may happen as a part of the school programme in the regular class or in special courses in the afternoon. There are also a lot of enrichment measures for gifted children outside school as e.g. weekend courses or summer camps. Today elaborated programmes – a few examples will be presented below – use both acceleration and enrichment to meet the needs of gifted students. In fact, the two kinds of measures are complementary, since saving time by acceleration provides learning time to meet the individual abilities and interests of the students.

There has been a lot of controversial discussion on the question whether or not gifted children should be educated in homogenous or heterogeneous groups. The advocates of *grouping* argue that increasing homogeneity will narrow the range of

variation in a class and thus will produce benefits for learning that are not possible with less homogeneity. Homogenous forms of grouping are special schools for the gifted, the above mentioned telescoping classes, pull out programmes, where students of several classes meet for a whole or part of a school day per week to work together, or cluster grouping within a regular class. In spite of the fact that teachers seem to prefer teaching homogeneous groups to teaching heterogeneous classes, grouping does not have a positive effect in general. In their meta-analysis of studies on the effects of different settings of grouping Kulik and Kulik (1992) found, that homogenous grouping does not seem to increase achievement in middle- and low ability groups. There is a small positive effect in high ability groups. Only if the curriculum is adapted to the learning levels of the group, definite benefits for achievement appear.

Successful Programmes

In the last decades many of successful programmes for the education of gifted children have been developed – many of them in the United States – which all combine elements of acceleration, enrichment and grouping in a different way. Only a few examples can be presented here:

Talent Searches: The Center for Talented Youth (CTY)

In 1971, Julian Stanley at the Johns Hopkins University in Baltimore, USA, initiated a talent search model that systematically targets to discovery and development of advanced ability in mathematics. Every year pupils aged 12 who scored in the top 5% of in-grade achievement tests with national norms routinely given to students in schools are invited to take the Scholastic Aptitude Test (now Scholastic Assessment Test). Students who score at the mean of students who are about 5 years older are accepted in the programme. These students get the chance to take a series of advanced courses in mathematical, scientific and verbal areas. Many of these courses are offered in the summer at the talent search centres. There is a close connection between assessment and teaching in the model – instruction is adapted to the individual skills of the students. The programme enables the participants to pass through the educational system at a quicker pace by getting credits from their schools for the programme courses and thus being able to enter university early. Positive results of this programme type have been well documented (Heller & Hany, 1996).

The Schoolwide Enrichment Model (SEM)

The Schoolwide Enrichment Triad Model, developed by Renzulli and colleagues, combines an approach for incorporating enrichment into schools, and promoting creative productivity with a flexible approach to identifying high potential students. After gathering a "talent pool" of students by a multifaceted step by step approach of identification (see above), three types of enrichment experiences are offered. Type I

consists of general enrichment experiences that expose students to new topics, ideas and fields of knowledge. Type II experiences provide the students with learning skills, promote creative thinking and problem solving skills, the appropriate use of advanced-level reference materials, and written, oral, and visual communication skills. Type III activities are investigative activities and artistic productions and depend on the students' individual interests and on their desire to pursue advanced level study in a certain area of knowledge. Renzulli and Reis (1994) present a lot of data that support the model.

Centerville City Schools

Centerville is a city in Ohio, USA that has been providing programmes for gifted children since the 1970s. In the last decade the Centerville schools have been moving from a pull-out model of service delivery to a differentiation model. Instruction for gifted children takes place in the general education classroom. Gifted education is viewed as a continuum of services and not as a standard programme that fits for all children. There are special teachers that are assigned to support the general education teachers in their differentiation activities. The standard curriculum is used but differentiated across all levels of schooling. Cluster grouping provides the gifted children with opportunities to spend time with children like themselves. Coleman and Cross (2005, p. 301) report, that Centerville City Schools have had the highest ratings on the state report card.

The Purdue Three-Stage Enrichment Model for Elementary Gifted Learners (PACE) and the Purdue Secondary School Model for Gifted and Talented Youth

The PACE model developed by Feldhusen and Kolloff (1979) is an ordered enrichment model in the form of a pull-out-programme that moves students from simple thinking experiences to complex independent activities. Stage I fosters divergent and convergent thinking skills. Stage II focuses on development in creative problem solving, and on Stage III independent study skills are trained. The Purdue Secondary Model composes several elements of enrichment and acceleration options as e.g. advanced placement courses, honours classes, cultural experiences or career-education. Especially for the PACE programme, research has documented gains in the fields of creative thinking and self-concept.

Summer Programmes: The German Schülerakademien

In 1988, a non-profit making German association started offering residential summer programmes for 16–19-year-old secondary school students. In 2003, the measure was extended to younger students. Students are invited to apply for the programme after successfully participating in one of several academic competitions in Germany or they are recommended by their schools. During the 17-day academy the students

can participate in one of several courses from diverse academic disciplines e.g. mathematics, physics, foreign languages, creative writing, music, etc. The main objectives of the academies are to give the opportunity to improve methods and abilities of knowledge acquisition, interdisciplinary thinking, and autonomous learning by working on a challenging task, to provide role models by encounters with creative, motivated and inspiring teachers or scientists and to meet equally able and motivated peers. Evaluations of the academies have shown long-term positive effects with regard to several non-cognitive personality traits and social skills. Similar results have been reported from residential summer programmes in other countries (Campbell, Wagner, & Walberg, 2000).

A Nationwide Programme in the UK: Young Gifted and Talented (YG&T)

YG&T is a national programme for gifted and talented education run by the English Department for Children, Schools and Families (Young, Gifted and Talented, 2007). The main objective of the measure is to establish a basis in schools for improving general service for gifted and talented learners.

The programme aims at identifying at least 10% of all students between 4 and 19 years for provision with furthering activities in and out of school. Schools are supported by providing training for leading teachers. Other parts of the programme are (1) an online portal with services, information and materials for gifted learners, parents, school/ college staff and local authorities, (2) a learner academy, and (3) excellence hubs in nine government regions, that offer a range of activities, including non-residential summer schools, master classes and workshops, online and blended learning models.

Teaching Gifted Children in Regular Classrooms

In spite of the above presented efforts that have been made to develop special programmes for gifted children, there is a strong shift to serving gifted children within their heterogeneous classrooms. This trend is in part due to the fact that special programmes are expensive and the budgets of public authorities are limited. Furthermore, there is a current climate of inclusion regarding special needs students. Whereas Passow (1988, cited in Coleman & Cross, 2005, p. 313) argues, that real differentiation for gifted learners should provide them with learning experiences that average students would not like to be involved in and would not be able to succeed in, several authors cast doubt on the assumption, that there is a special gifted-child-pedagogy (Kaplan, 2003). Tomlinson (1996) as well as Coleman and Cross (2005) postulate essential commonalities between good instruction in general and instruction for highly able learners. Characteristics of instruction as e.g. a student centred learning environment which is active and responsive to learner interests and needs, rich content, fostering of higher level critical thinking, certain instructional strategies as problem solving, discovery learning, debating, mind mapping, and so on, are all useful and eligible for all children. There is no particular teaching or learning strategy per se that exclusively suits the needs of gifted learners but the strategies appropriate for all learners

have to be applied in a modified intensity. Tomlinson (1996) sets up nine continua for modifying the employment of content, process, and product to adapt instructional practice to all learners: (1) foundational to transformational, (2) concrete to abstract, (3) simple to complex, (4). few facets to multi-facets, (5) smaller leap to greater leap, (6) more structured to more open, (7) clearly defined or fuzzy, (8) less independence to greater independence, (9) slower to quicker. For the first eight continua the second end of the scale is suited more to the needs of gifted learners. The pace of learning for gifted students can be quicker as well, for contents or skills they already master, or slower, if there is need for more depth or breadth of study.

Montgomery (1994, p. 320) also wants to meet the special needs of all learners by advocating a differentiated curriculum and a flexible approach of teaching. To her differentiation means (a) "The setting of different tasks at different levels of difficulty suitable for different levels of achievement." (b) "The setting of common tasks that can be responded to in a positive way by all pupils/students." (c) "The setting of common tasks to which all pupils/students can contribute their own knowledge and understanding on collaborative activities and so structure their experiences and progress from surface to deep learning and thus be enabled to achieve more advanced learning outcomes."

Open-ended activities can be such an instrument of providing students with tasks they can respond to on their personal level of knowledge and skills. Hertzog (1998, p. 216) offers an expanded definition of open-ended activities as activities that "provide learners with choices in the content, process, or product domain". In a comparative study of varying options concerning these three domains she showed, that the greatest differences on students' responses were enabled by tasks for which the children had no options within the product domain but in the content or process domain, e.g. choosing a certain topic or area of study, a sequence of study, materials, selecting work partners, working at school or at home or choosing from processes specific to a discipline. In case of unlimited choices on the product domain, the activities were often group-oriented and did not reveal any differences in individuals' abilities.

Kennedy (1995), as well as Willard-Holt (1994), suggest curriculum compacting as a basic strategy for individualizing instruction. After compacting, according to Willard-Holt supplemental materials that extend the curriculum should be offered. Students should be allowed and be trained to schedule their own work. They should be given the opportunity for independent projects and assignment choices. The monitoring of individualized instruction could be managed by individual or group contracts that delineate the products that should be created and the timeline to be followed, by conferencing with single children or groups, or using charts or product folders. Kennedy (1995) furthermore recommends the fostering of an atmosphere of intellectual and academic risk-taking, the encouragement of creative approaches to problems, and rewarding the struggle with open ended and complex issues.

Providing children with individualized instruction is not an easy task and enhances the work load of the regular classroom teacher. Many teachers doubt if they can work with gifted children or just don't feel that they have time to plan individualized learning processes. Measures that can be adopted to facilitate differentiation are teacher training in gifted education, the application of co-teaching strategies or the employment of special teachers for gifted children that support regular classroom teachers in their differentiation activities.

Conclusion

Children with outstanding abilities, regardless of what these abilities may be, need supportive educational environments to help them to develop their potential into high performance. Offering measures of furtherance or special programmes for a certain group of students makes it necessary to determine if a child belongs to this group or not. There are various criteria that can be adopted in identifying gifted and talented children and it is important to adapt the means of identification to the procedures or programmes that shall follow them. Step by step models or models which combine different criteria, best meet individual needs of gifted students and minimize the danger of incorrect identification.

Allowing students to complete the normal curriculum faster, extending and sometimes replacing the content of the regular curriculum and instructing gifted students in homogenous groups are well proven principles in gifted education and in the last decades a great number of special programmes for gifted and talented learners adopting these principles have been developed and implemented all over the world. However, special programmes for gifted and talented children are not necessarily available everywhere or it may not always be possible to place a child into such a programme. Furthermore, even in a special programme children's profiles of strengths and weaknesses may be very distinct. Hence a central issue of gifted education should be, and actually already is, the development and improvement of strategies of individualized instruction. Thus, far away from the frequently advanced view that gifted education is just optimizing the situation for a small group of children who might be considered as privileged anyway, the improvement of education for gifted and talented children could be a way of improving instruction for all children.

Biographical Note

Martina Endepohls-Ulpe lives in the city of Bonn, Germany. After acquiring her PhD in psychology at the University of Bonn she continued working there as a scientific assistant for several years. Since 1990, she has been working as a lecturer at the University of Koblenz-Landau in Koblenz, teaching educational and developmental psychology to teacher students and students of pedagogy. Her experiences in the field of teacher education and insights into the German educational system connected with her own children's education aroused her interest in the topic of gifted education. In the last years she has published several articles especially dealing with influences on teacher's abilities of identifying gifted children and the impact of children's gender and social behaviour on their identification as gifted. Other topics of research and publishing have been gender differences, consequences of divorce for parents and children, and recently, technology education for girls.

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TEACHING "AT RISK" STUDENTS: MEETING THEIR NEEDS

Ramon Lewis and Tricia McCann

Introduction

Among the many responsibilities of teachers, one which is becoming increasingly significant to the communities they serve is student welfare. Although the welfare of all students is of concern, there is a group who create a particular need. These are students who have been identified as being "at risk." Traditionally student welfare has mainly been relegated to parents, churches and cultural groups rather than seen as a responsibility of the classroom teacher. In the present climate however, it is argued that the teacher's role increasingly needs to encompass welfare strategies (Mitchener & Schmidt, 1998).

Reasons for particular concern with students "at risk" not only relates to the extent of their need but also to the observation that their issues often manifest as challenging behaviors at school, including withdrawal, truancy, disengagement, resistance and disconnection. How teachers respond to such behavior will likely depend upon their knowledge of management strategies, the prevailing discipline paradigm and personal philosophy. This chapter identifies factors related to whether or not a student should be considered at risk before providing a discussion of how teachers may respond productively to at risk students. In examining how to help such students to engage in education and schooling, the chapter focuses on teacher behavior, curriculum and cocurricular programs.

Students "at risk" Research

The concept of being "at risk" is essentially one of vulnerability and particularly refers to underachievement in an academic, social and personal sense. Young people "at risk" can be marginalized by family, peers, school and community and as a result, feel misunderstood, unaccepted, isolated and treated unfairly. The comprehensive issues that contribute to young people "at risk" are concisely addressed by Withers and Russell, (2001, pp. 12–13) in Table 1 below.

Table 1	A summary	of students	"at risk"	research ^a
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The individual		
 Psychological factors Low self-esteem Low motivation Primitive cognitive constructs, faulty belief Low intelligence Inability to relate Poor bonding to family, schools high level aggression 	 Physical factors Poor health, illness and disability Low birth weight So Low level of autonomic and central nervous system arousal 	Behavioral factors • Disruptive behavior • Hyperactivity • Passivity • Early pregnancy/motherhood • Offending • Substance use/abuse • Poor academic performance • Early/chronic truancy • Association with antisocial peers/ adults • Sex work • Social isolation
The family Family structure • Fragmented, reconstituted family structures • Large family size • Separated from family	 Family functioning Poor family management practices Disturbed parent child rela- tionships Conflict Abuse Modeling on antisocial parents High mobility Family disorganization 	Family socio-economic status • Low parental income • Low parental education attainment • Unemployment
The school School organization • Rigid organizational practices • Repressive discipline • No help for early leavers and barriers to reentry • Large class size • Large school without substructures Community and societal factors • Extreme poverty • Antisocial community	Curriculum • Unstimulating content • No participation in decision making • Passive teaching–learning strategies • Competitive exam dominated assessment	School climate • Unsupportive school culture • Negative teacher/student relationships • Negative peer relationships • Absence of school counselors • Lack of student participation • Poor school/home relationships • Poor staff professional development
norms • Neighborhood disorganization • Demographic factors: males and non-anglo ethnic groups		

^aAdapted from Withers and Russell (2001, pp. 12–13)

General Indicators

In summarizing the data in Table 1, it is useful to dichotomize factors associated with students at risk into those which relate to families and society, and those that are more closely related to school and learning.

Family and Societal Issues

Students primarily learn their patterns of behavior from the socializing units of the family, so the impact of family issues upon students at risk cannot be disregarded. Social researchers and those interested in exploring culture from which "at risk" students originate (Johnson, 1998) have identified familial issues such as low socioeconomic status, single parent families, low parental educational status, familial substance abuse, criminal activity, violence, poverty, lack of parental supervision, poor home–school relationships and ethnic minority status as indicators of students "at risk." Some additional indicators are based upon their parent's experiences such low achievement in school, unemployment, poverty, a lack of involvement with their children's education, or failure to impart values, aspirations and motivation to persevere and be successful in school. Students' responses to such parental input include truancy, lack of social skills, lack of academic skills such as literacy and numeracy and a lack of vision for their future (Rumberger et al., 1990).

Race is also perceived to be a major contributor to and indicator of students who are considered to be "at risk" (Johnson, 1998). In the USA this group has traditionally embraced, black, Hispanic and Native American students with an increasing number of white middle class students.

School and Learning Issues

Identification of learning disabilities, especially in the areas of Literacy and Numeracy, is seen to be pivotal in the recognition of students who will become at risk of academic underachievement. The research on using literacy or language difficulties (Sideridis, 2002) as a means of identifying students at risk (MacCoubrey et al., 2004) supports the notion that it is important to identify and address such issues early in schooling with Literacy programs across all school subjects, not just English.

Programs such as the US initiative "No Child Left Behind" intend to ensure that disadvantaged students achieve academic proficiency by placing responsibility for student achievement with the schools, highlighting their student support systems and curriculum response to student needs.

Theorizing Behavior

Much of the literature on students at risk is concerned with their overt, aggressive behaviors. There is much less available about passive, withdrawn behavior yet links between withdrawal and suicide are mentioned in the literature (Patton, 2000).

In general, attempts to explain challenging student behavior in classrooms result in the identification of two categories of behavior. The first represents misbehavior as being the result of the impact of some temporary condition or context on the students, and the second conceptualizes it as a more ongoing, repetitive issue related to characteristics of the students. The temporary response is where the students' misbehavior is seen as a way of relieving a short-term emotional state stimulated by some unsatisfactory aspect of their environment or curriculum (McInerney & McInerney, 2006). Their emotional responses may include frustration, anxiety, boredom, fear or excitement.

The second identifiable type of misbehavior is persistent, repetitive, challenging behavior. It can take many forms. Some of the behavior is merely irritating, such as moving or talking without permission, forgetting equipment, rocking on chairs, etc. More severe forms of repetitive behavior may involve passive resistance and arguing with, or aggression toward, teachers and other students. When students constantly manifest inappropriate behavior, teachers tend to identify them as being "at risk." The second form of "at risk" behavior also includes consistent attempts to avoid schoolwork or school. Although students may have different reasons and motivations for their actions their behavior is similar in that it appears resistant to teacher and school interventions, and therefore the students can be grouped together under the label "at risk."

Students who fall into the second category are often unaware of their motivations for behaving inappropriately and are therefore unlikely to respond to standard behavior management techniques such as hinting, demands, punishment, or even aggression. Because they cannot articulate why they misbehave they are even unlikely to respond to discussion, mediation or other forms of "restorative practices".

Theorists such as Glasser (1992) and Pearl and Knight (1999) suggest that all behavior reflects attempts by the individual to have his or her needs met. It is therefore essential to examine what "at risk" students' unmet needs may be and how teachers and schools can address them. The most significant of these needs appears to be the need to feel a sense of belonging, competence and usefulness.

Belonging and Connection

The need to belong is associated with differences, not just in classroom behavior, but also in cognitive processes, emotional patterns, health, and well-being (Baumeister & Leary, 1995). A positive sense of relatedness affects peoples' perceptions of others, leading them to view friends and group members more favorably than others, and to think about them more often and in more complex ways. "... human beings are fundamentally and pervasively motivated by a need to belong, that is, by a strong desire to form and maintain enduring interpersonal attachments" (Baumeister & Leary, 1995, p. 522).

The emotionally driven responses of students "at risk," does not just depend upon their relationship with peers but also with teachers. Their behavior does not just happen out of an attack of whimsy but is in response to feelings of rejection, and the more persistent the feelings of rejection, the more persistent the misbehavior. "Evidence suggests a general conclusion that being accepted, included or welcomed leads to a variety of positive emotions (e.g., happiness, elation, contentment, and calm), whereas being rejected, excluded, or ignored leads to potent negative feelings (e.g., anxiety, depression, grief, jealousy, and loneliness)" (Baumeister & Leary, 1995, p. 508).

It needs to be recognized that in the eyes of theorists such at Dreikurs (1968), before they begin school, students have developed a sense of self-worth based on their perceptions of interactions with parents and siblings within the family. "At risk" students have frequently concluded that they are not valued within their family and hence develop a strong need to be recognized within groups, even if this need is met via socially inappropriate behavior.

It may be assumed by teachers that students' need for a sense of belonging, to feel connected with others and to have trusting ongoing relationships with members of the classroom group, including the teacher, are needs that are met automatically when a class group forms. In such a complex environment, as a classroom, it could be argued that by sheer randomness, all students should find someone to meet their needs, and if not, are capable of supporting their own self esteem throughout that class without resorting to disruptive behavior. Such assumptions may lead to classes where student needs are, at best, not recognized or supported, or worse, ignored.

If the need to belong has such a powerful influence over the behavior and engagement of students, what can teachers and school do to integrate students currently perceived "at risk"?

In attempting to cater for the needs of "at risk" students, schools and teachers need to primarily focus on classroom interaction, curriculum and assessment, and cocurricula activities that build resilience. Within the domain of the classroom there are a number of things teachers can do to provide for students essential needs.

Classroom-Based Teacher Behavior Toward "at risk" Students

There are four main recommendations related to classroom interaction for teachers wishing to minimize the misbehavior of students at risk. These are stay calm, provide encouragement, recognize appropriate behavior and finally observe the students being competent and seek their help. Each of these will be addressed briefly in turn.

Stay Calm

Often the inappropriate behavior of "at risk" students is so repetitive or confronting that teachers are provoked to react in ways which decrease rather than increase the students' feelings of belonging. Teachers may express their irritation, frustration, disempowerment, hurt or fear through their posture, the content of their message and the tone of communication toward the student. The last thing a teacher should do when confronted with a student who is acting inappropriately through feelings of disconnectedness is to react

instinctively. As explained above, an instinctive response is not likely to improve the student's behavior as it will only enhance the "at risk" students' sense of lack of belonging and as explained, it is this very feeling that is driving the behavior.

Basically, a teacher who reacts to an attention-seeker with irritation and annoyance, to a power-seeking student with anger or exasperation, to a revenge-seeking student with fear or hurt, or to a withdrawing student with despair or helplessness, becomes part of the problem, not part of the solution.

Teacher's unthinking responses may even make matters much worse by moving students' unconscious need from attention to power, or from power to revenge. The ideal response should at all times be calm and considered. This call for teachers to control their natural reactions is based on Dreikurs' and others' belief that such unthinking reactions feed "at risk" students underlying low self-concept (Dreikurs, 1968).

Provide Encouragement

Since many "at risk" students behave inappropriately only because they feel so discouraged that they think they could not be accepted by behaving normally, it is not surprising that a major emphasis is placed on giving students who behave unacceptably lots of encouragement. Make no mistake, it is not their behavior that should be encouraged, but the person. In providing encouragement (not only to students who behave unacceptably but to all students), teachers need to let them know that they belong, and are useful and important members of the class who can contribute valuably in socially acceptable ways.

According to Dreikurs, it is important when talking about encouragement to distinguish between recognizing achievement and recognizing effort and process.

In contrast to making a student's approval conditional upon satisfactory achievement of some task, as teachers so often do, it is important to accept children as they are, by separating their efforts and involvement in an activity from the quality of their performance. Teachers frequently attempt to assist students by indicating where their performance has fallen short of the required standard in an attempt to motivate them to improve their efforts. For students "at risk" it would be more helpful and encouraging if teachers said something like "That's great, it's good to see you are enjoying this topic."

If teachers comment on aspects of the product that are unsatisfactory the student will probably feel deflated and rejected. If they comment on aspects of the product that are acceptable or even exemplary, students with low self-concept are likely to feel that they are acceptable only as long as they live up to the expectations of the teacher. Thus the conditional nature of their relationship with the teacher is still highlighted. In contrast encouragement gives students the courage to keep on trying and at the same time allows them to accept their current best efforts.

In summary, encouragement of acceptable behavior is essential to making a student realize that he or she doesn't have to behave inappropriately to be recognized, and that recognition and belonging can be gained through normal, acceptable, achievable behavior. However, this process may take a long while to have a consistently notice-able effect. What should a teacher do about the students' unacceptable behavior in the meantime?

Recognize Appropriate Behavior and Punish Intelligently

Students "at risk" need to have their appropriate behavior recognized and inappropriate behavior subjected to a series of increasingly severe consequences. Not to apply consequences to the behavior of students "at risk" would be paramount to giving these children the idea that we are thinking "poor you, we can't expect more from someone like you, so we won't". It is important that students realize that teachers do have faith in the at risk student's ability to live up to reasonable expectations. Even though these students may doubt their capacities, teachers should never let a student feel that they see him or her as less capable and a "victim", to be pitied. Nevertheless, it is particularly important that when students' misbehavior is addressed, it is done in a way that the student is least likely to feel rejected. This is not to say that teachers should avoid the use of punishments, but rather that the choice of punishment should be such that it enhances the students' sense of competence, usefulness and belonging, rather than undermine them.

When choosing punishments for their misbehavior therefore, teachers should reflect on the fact that any punishment which further undermines the student's self-concept is probably going to prolong or increase the inappropriate behavior. In contrast however, any consequence which involves at risk students making use of their usually considerable kinesthetic abilities to assist someone is clearly a good idea. This is because it is likely to increase the students' sense of self-worth, and thereby reduce their need for the recognition that is gained through acting out. Some productive consequences may be: assisting in the school's general office (photocopying, folding papers), helping the maintenance person (cleaning desks, fixing damaged equipment), assisting the gardener (planting, pruning) or even tutoring much younger children.

There is a danger, however, that if these sort of concept building activities are only offered as punishments, when students are placed in situations in classrooms which stimulate strong feelings of self doubt, they may intentionally misbehave in order to be placed in a more nurturing and supportive environment, even though it is recognized by the system as a punishment.

Observe the Students Being Competent and Seek Their Help

It has been argued above that students "at risk" have a low regard for themselves. Therefore, in order to increase the likelihood that these students come to believe that a teacher values them, he or she should make the effort to observe them being competent. Since students "at risk" are often kinesthetic, visual and/or rhythmic learners (Gardner, 1999), rather than linguistic and logical in their learning styles, this may require a teacher to watch the netball during lunchtime, or visit a Music, Art or Phys. Ed. lesson. It may even require selecting a topic or process for the normal curriculum just because it is within an "at risk" student's sphere of competence, for example PowerPoint presentations on Karate or hairstyling, posters on motor bikes or fashion and songs on skateboarding or teen culture.

In addition to observing student competence, it is of even greater value if a teacher can find a way to utilize that competence to be of assistance to him or herself, or the school in general. If so this may help to convince students "at risk" that they are of value.

At risk students may be of assistance in a variety of ways, for example they could be requested to do something as simple as carrying books or equipment, help collect things or bring resources from home; things they are capable of doing that makes a valuable contribution to the workings of the teacher, the class and the school.

Curriculum

As indicated earlier, students at risk are frequently illiterate and innumerate. At best they often have achievement levels well below that of their peers and generally seem not to be "written word" people. In contrast, if they achieve at all, it is generally in areas such as sport, art, music or technology. As indicated above, they tend to be kinesthetic and visual learners rather than linguistic and logical learners (Gardner, 1999). Consequently any attempts to integrate at risk students by modifying the curriculum will require a decrease in reliance on linguistic skills for success in the classroom, and increase in the significance of visual and performance skills. Assessment would also need to be based on visual output, role-play etc. A recent example that crossed our desks has a group of at risk students spending ten weeks building motorbikes from wood, papier-mâché and cardboard. According to the teacher involved, the students used arithmetic, measurement and costing for the Maths element and for the English the students wrote reports at intervals about procedures and materials, culminating in a final report wrapping up the whole project.

School Programs

Most programs for students "at risk" can be categorized into "prevention," "intervention" or "postvention" programs. In order to address the issues that fall broadly under the heading of societal issues, programs that are introduced into schools often intend to redress the balance of factors identified earlier that may be adversely influencing the students outside the school environment. They cannot redress the poverty the student is experiencing in his or her home life but can supply food through a breakfast program, academic support through a homework group and skills support through Literacy and Numeracy programs. Some schools also invite family members to attend remedial academic programs or parenting programs at the school.

Prevention programs are aimed at preventing "students at risk" being created in the school in the first place and are therefore generally supportive programs designed for the whole student cohort. Many of the prevention programs incorporate whole school curricula addressing such issues as bullying and drug and alcohol use and abuse. Many governing bodies of schools require data to support the implementation and continuation of these programs and it no easy task to find data to support the contention that by providing such a program you have avoided creating a student at risk, so a lack of accountability for these programs often, ironically, puts them at risk.

Intervention programs are generally proposed for students already identified as being "at risk" but who have yet to totally disengage from school or are still able to be rescued. Intervention programs include

- selective literacy and numeracy support for students who have been identified as not meeting their year level standards.
- decreasing truancy through positive measures such as points systems, with rewards for regular attendance or punitive measures such as strict roll keeping procedures with detention for nonattendance. The assumption underlying this procedure is that attendance, even without engagement, has a positive effect upon retention and behavior.
- introducing alternative curriculum offerings such as special year nine and ten program based around city campus activities, outward bound programs with physical challenges and teamwork and problem-solving activities.
- Service learning activities such as assisting the aged or infirmed.

The various stakeholders involved in the social issues of "students at risk" and their various agendas influence the ways in which intervention programs may be implemented.

Postvention programs are designed to follow up after an incident, such as attempted suicide or criminal behavior. In order to keep the at risk student in school, a whole school approach to support the student may be implemented.

Summary

The issue of "at risk" students is one that is occupying a more central place in schooling than has historically been the case. This observation appears to be related to a range of factors that include issues as general as community and family fragmentation, the economic and political imperative for increased student retention¹ and the need for individual psychological resilience.

At least three possible responses appear common to those interacting with students "at risk." The first is to ignore their needs and behavior, and effectively hope it will go away. The second is to try to challenge or deny these students' needs and thus escalate the issues and the third is to implement classroom strategies and programs designed to meet their needs. The least that can be expected of teachers and schools is harm minimization, and the most is to provide a whole school environment that meets the needs of the whole school community, including the teachers and the students "at risk."

Frequently the behavior manifested by such students challenges teachers, peers and the school. In this chapter we have identified three distinct levels at which this behavior may be addressed. The first focuses on the quality of the interaction between teacher and student, the second on the suitability of the curriculum and the third on schoolwide programs. What appears to be in common to interventions on all levels is recognition of the students' worth and significance, attempts to strengthen students' self-concept through highlighting their competence and connectedness, and providing guidance characterized by a lack of hierarchical authority. Whereas programs clearly designed to meet the needs of students "at risk" are frequently successful at improving the lives of these students, their challenging or provocative behavior tends to stimulate responses from teachers and school administration that are less than productive. Until classroom and programmatic offerings are synchronous in meeting the needs of these students, they will continue to be "at risk."

Biographical Note

Ramon (Rom) Lewis is an Associate Professor in the La Trobe University School of Educational Studies, Bundoora. He has specialized in the area of classroom management for over 25 years and has published five related books and many articles describing the outcomes of his research. In addition to his academic position, Dr. Lewis teaches part time or consults with schools in a bid to explore the gap between theory and practice. He is a very experienced and well received provider of PD. Currently Dr. Lewis is examining the effect of Developmental Classroom Management on student engagement in eight schools (over 2 years). Next year he begins a 3-year study with an additional 53 schools. His new book, *The Developmental Management Approach to Classroom Behaviour: Responding to individual needs*, will be published in 2008.

Tricia McCann lectures in the La Trobe University School of Educational Studies. She teaches within the areas of "Pastoral Care," "At Risk Students: a critical approach" and "Communication and Interpersonal Skills." As her area of research, she specializes in the students "at risk," adolescent consciousness and meaning making and school based programmatic responses to student needs. She has provided Professional Development for teachers centering on counseling and listening. She has worked extensively in the Advocacy Program which was designed to support students by providing one-to-one sessions between teacher/Advocates and students to support learning and well-being needs. Tricia is a chief investigator on a major research grant into student Advocacy in schools.

Note

1. Retention here refers to continuing in school rather than "dropping out." It does not mean repeating a year.

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TEACHING INDIGENOUS POPULATIONS

Rodney A. Clifton

Introduction

Cultural and ethnic differences play a major role, both positive and negative, in modern societies (Harrison & Huntington, 2000), not least in the education of ethnic minorities, particularly in the education of indigenous students (Glazer, 2000). In modern societies, the education of indigenous students is made difficult, simply and importantly, by culturally specific and often different conceptions of the legitimacy of both schools and teachers (see, e.g., Champagne & Abu-Saad, 2006; Jordan, 1995; Kleinfeld, 1995). This chapter argues that to create more effective education for indigenous students three things are required. First, authority-based schools that are sensitive to the culture of students, parents, and community elders are necessary. Second, indigenous people need to understand, and accept, the legitimate function that schools serve in modern societies. Finally, it is necessary to have truly empathetic teachers who are also experts in the subjects they teach. These conditions are necessary for all successful teaching and learning, but they are especially crucial when nonindigenous teachers are teaching indigenous students; potentially, if these conditions are met, they provide indigenous students with the opportunity of participating in both their traditional community and the modern society where they live.

Indigenous Populations: Anthropological and Sociological Perspectives

In the research on indigenous populations, there are two almost completely separate literatures, an anthropological literature that focuses on culture and a sociological literature that focuses on social structure (see, e.g., Clifton, 1994; Edgerton, 2000; Juan, 1994; Patterson, 2000). As a consequence, anthropologists and sociologists think of indigenous populations differently. Usually, for anthropologists, indigenous people live in tribal communities, share many genetic and cultural characteristics, and often have been relatively unaffected by urbanization and industrialization. Thus, anthropologists consider practically all tribal, culturally-distinct populations who have continually resided in a specific area for a relatively long time as indigenous. Specifically, they

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see the Australian Aborigines, the Blackfoot, the Pygmies, the Turks, and the Welsh, as indigenous populations. Usually, for sociologists, on the other hand, indigenous populations have an additional, extremely important structural characteristic: they have been colonized in their recent past, and they have been forced to live according to the dictates of their colonial masters. Thus, sociologists define the Australian Aborigines, the Blackfoot, and the Pygmies as indigenous because they meet the criteria used by anthropologists and because they have been recently colonized. Sociologists generally do not consider the Turks or the Welsh as being indigenous because they have *not* been colonized, at least not recently.

Thus, it is not surprising that anthropologists and sociologists also think about the education of indigenous people differently. For anthropologists, education is typically conceptualized as the socialization, or enculturation, of children so that they become productive adults within their respective societies (see, e.g., Hermes, 2005; LaFrance, 1994; Stairs, 1994). In traditional societies, formal, school-based education is nonexistent, and socialization, which is much broader, is the responsibility of parents and community elders with no one specifically taking the role of teacher. Thus, socialization is limited to traditional roles and statuses, which are almost universally segregated by gender, within specific indigenous communities (see, e.g., Crossette, 2000; Htun, 2000). In contrast, sociologists typically think of the education of indigenous populations as taking place in modern schools that are highly structured bureaucracies with specific people taking the role of teacher (see Bidwell, 2001). Contrary to the socialization process in traditional societies, education in modern societies is directed at preparing students to think critically about their society and, more specifically, at preparing students, both males and females, for a wide variety of occupational and social roles that are, at least recently, becoming less and less segregated by gender.

Consequently, it is not surprising that the generalizations that anthropologists and sociologists derive from their research also differ (see Clifton, 1994; Juan, 1994). Anthropologists tend to emphasize cultural beliefs and practices that affect children from the moment of birth, if not before, focusing on specific societies and ethnographic examples (Patterson, 2000, p. 206). Sociologists, on the other hand, tend to emphasize that indigenous people, in Australia, Canada, the United States, at least, generally live on the margins of modern societies. The most common explanation of the marginalization of indigenous people is, of course, that they have been recently conquered, their traditional institutions have been destroyed, and they have been prevented by structural factors from successfully adapting to the "foreign" schools and teachers that have been imposed upon them (see Champagne & Abu-Saad, 2006; Jordan, 1995; Kaomea, 2005; McCarty, Borgoiakova, Gilmore, Lomawaima, & Romero, 2005; Sachs, 2000; Snipp, 1992). The sociological literature assumes that few of the students and teachers have mixed ancestry, and that students and teachers share few, if any, cultural characteristics. With growing intermarriage of indigenous and nonindigenous people and with the increasing number of indigenous teachers, this assumption is becoming increasingly questionable in many modern societies like Canada and the United States.

There are at least three other important differences between socialization and education in traditional and modern societies (see Clifton & Roberts, 1993). First, students are

conscripted to schools in modern societies while in traditional societies young people are not usually forced to follow community elders around to learn from them. A search of half a dozen recently published anthropological textbooks did not find a single example of the equivalent of truant officers or attendance laws in the hundreds of examples described. Second, unlike traditional parents and community elders who socialize small groups of young people, teachers are responsible for educating relatively large groups of students. Again, very little was said about the size of socialization groups in the anthropology textbooks, but not one of the hundreds of photographs showed a large group of young people, or even a mixed-gender group, with an adult acting as a teacher. Third, modern education is structured so that student achievement and status mobility are weakly linked, while traditional socialization is structured so that achievement and status mobility are strongly linked. That is, in modern schools, all students generally spend a set length of time studying a set curriculum - the "lock-step," 12 years of elementary and secondary educational system - while in traditional socialization young people judged competent not only gain status but also progress immediately to more advanced learning. LaFrance (1994, p. 20), a Mohawk from Canada, reflects this sentiment: "Our experience with past and current Western schooling... is that it separates 'education' from living; the experience alienates us from our surroundings and therefore, our culture." Because this sentiment is shared by indigenous people around the world, it is important to ask if indigenous students need to be marginalized from schools, nonindigenous teachers, and modern society.

Indigenous Students and Modern Education

Implicit in what has already been said is that learning in traditional societies is much more likely than in modern schools to have three important characteristics: first, it is much more likely to be perceived as being relevant and therefore important to young people; second, it is more likely to be interesting and challenging; and third, it is much more likely to be seen as leading to learning other important and challenging material (Bredemeier & Bredemeier, 1978, pp. 168-170). Indigenous youths in traditional societies share a culture with their elders, but they do so differently than young people in modern societies. Specifically, in modern societies students and teachers share a number of values and interests, but they often operate with different, or opposing, objectives which can be problematic because they can result in irreconcilable antagonism and conflict (Bidwell, 2001, p. 103; Bryk & Schneider, 2002, p. 7). Thus, students in modern societies are less likely to perceive their education as important, challenging, or closely linked with their future lives. Waller (1965, p. 196) highlights this potential opposition in his classic description, but he only hints at the serious cultural differences that often exist between indigenous students and their nonindigenous teachers:

Teacher and pupil confront each other with attitudes from which the underlying hostility can never be altogether removed. Pupils are the material in which teachers are supposed to produce results. Pupils are human being striving to realize themselves in their own spontaneous manner....

The Issue of Legitimacy: Negotiation, Coercion, and Authority

At the heart of the perennial tension between the competing objectives of students and teachers in modern schools is the issue of *legitimacy*. Why should students acknowledge the right of teachers to direct their conduct, particularly indigenous students facing nonindigenous teachers? Like community elders in traditional societies, teachers have three basic ways of responding to this question: namely, *negotiation, coercion,* and *authority* (Clifton & Roberts, 1993). Simply stated, the teachers' responses vary with the assumptions they make about the alignment between their objectives and their students' objectives.

The assumption behind *negotiation* is that if teachers bargaining with students, they will build a consensus that will align their respective objectives. The teacher is saying "If you comply with my requests, I will give you something that you value more than you value what I am asking you to sacrifice." To be genuine, this kind of legitimacy assumes parity between the cultures of students and teachers, and where the cultures are distinct, the process often creates the conditions for endless bargaining on virtually every aspect of classroom life. Thus, by negotiating, teachers risk having to explain and justify, to each and every student, every activity in the classroom. Consequently, without a good understanding of the students' culture (such as their conception of "time"), teachers have great difficulty distinguishing the idiosyncratic or disruptive behavior from the cultural norms of the traditional community. Not surprisingly, considerable research suggests that in many Western societies, especially where there is substantial cultural variation in schools, teachers spend a vast amount of time and effort bargaining with students (see White, 1984). Negotiation, as a result, is not an efficient strategy for teachers to use in gaining compliance from students. In addition, even though bargaining is a natural process in modern schools, it is rarely used in the socialization of young people in traditional societies where coercion and authority are much more common.

Coercion occurs when teachers impose their wills on students despite the students' resistance. Where coercion operates, elders force young people and teachers force students to comply with their demands: the elder or the teacher says "If you don't do what I ask, things will go badly for you and I will ultimately make you comply." The assumption is that elders and teachers control crucial resources so that young people cannot sustain their noncompliance without intolerable losses. One problem with coercion in modern schools is that it subverts the students' traditional culture, and thus, it breeds resentment and alienation (see LaFrance, 1994; Stairs, 1994). We now know, for example, that the coercion used by nonindigenous teachers and administrators to "encourage" indigenous students to attend residential schools, particularly in Australia, Canada, and the United States, had extremely debilitating effects on them and even on their children (see Champagne & Abu-Saad, 2006; Clifton, 1972; Jordan, 1995). In addition, coercion exemplifies a dubious moral and educational stance in modern societies with well-developed human rights codes that protect students from overbearing teachers and administrators (Bidwell, 2001; Bryk & Schneider, 2002; Crossette, 2000).

The third way elders and teachers gain compliance from young people and students is by *authority*. In schools, legitimate educational authority entails voluntary compliance

that is rooted in shared objectives, the respect that both students and teachers have for each other even when they have different cultural traditions, and their mutual acceptance of the bureaucratic structure of schools. So, the question "Why should I follow your directives?" is answered in words such as "We agree that this school, my understanding of you and your culture, and my expertise and experience justify my legitimate requests." Such an agreement, requires that teachers and students share a basic understanding of legitimacy, that the requests are, in fact, legitimate, and that their cultures and the society do not seriously constrain their shared interaction, which is a typical problem in colonial and postcolonial societies (see Bryk & Schneider, 2002). These assumptions are problematic, but in classrooms based on authority, extensive resources are not consumed in bargaining, and teachers are not continually trying to force students to comply with their requests.

Not surprisingly, authority is also used in socializing young people in traditional societies, but it is different because parents' and elders' interactions with young people are generally bounded by overlapping institutions and looser legal structures. In modern societies, the teachers' legitimacy is bounded by the bureaucratic structure of the school and does not overlap to a great extent with the responsibilities of parents and elders. Nevertheless, in order for teachers to be successful with indigenous students, their authority needs to be supported by parents and elders. Socialization practices vary across societies, but in many traditional societies, young boys learn by hunting with older men and young girls learn domestic skills by working with their mothers and grandmothers. Thus, traditional societies rely on a socialization process where young people gradually evolve into fully-functioning adults. Colin Turnbull (1961, p. 130), for example, describes how Pygmy boys are socialized using both coercion and traditional authority:

For children, life is one long frolic interspersed with a healthy sprinkle of spankings and slapping. Sometimes these seem unduly severe, but it is all part of their training. And one day they find that the games they have been playing are not games any longer, but the real thing, for they have become adults. Their hunting is now real hunting; their tree climbing is in earnest search of inaccessible honey; their acrobatics on the swings are repeated almost daily, in other forms, in the pursuit of elusive game, or in avoiding the malicious forest buffalo. It happens so gradually that they hardly notice the change at first....

The Bureaucratic and Individual Dimensions of Authority

As suggested, parents, elders, and teachers commonly rely on authority derived from both the institutional context and their individual expertise in legitimating their educational expectations for young people. In his classical analysis, Max Weber (1947) identified three types of authority: namely, *traditional*, *charismatic*, and *rationallegal*. *Traditional authority* is based on the perceived sanctity of cultural traditions; in teaching, it implies that teachers have a status similar to parents and elders, who are also guardians of important but different traditions. As a result, parents, elders, and teachers have the legitimate right to make demands on young people in their respective jurisdictions. In other words, the social structure of the home, the community, and the school are legitimate because they are rooted in customs and rituals that help young people prepare for successful lives. In appealing to tradition, a teacher, a parent, or an elder responds to the hypothetical question "Why should I?" by saying "It is my right to tell you, and it is your duty to comply because people in your status have tradition-ally complied with the legitimate requests from people in my status."

Charismatic authority, in contrast, is legitimated by the respect that people have for the attributes and performances of specific individuals. This respect, of course, is associated with the teacher's, parent's, or elder's ability to fulfill the specific needs of young people. Charisma implies that teachers, parents, and elders truly care about the welfare of the young people, and the language used to describe this type authority is altruistic, caring, and empathetic (Noddings, 1992). In fact, empathetic authority is a better concept than charismatic authority, contrary to Weber (1947), because charisma is, historically and culturally, considered to be divinely conferred, whereas empathy opens the possibility that teachers can develop their capacity to understand the culture and feelings of students. The anthropologist Robert Edgerton (2000, p. 131) claims that "Humans in various societies, whether urban or folk, are capable of empathy, kindness, even love, and they can ... achieve astounding mastery of the challenges posed by their environments." This type of authority is more diffuse, intense, and personal than traditional authority, but like traditional authority it is strongly rooted in culture because people in different societies express empathy differently. In appealing to empathy, a teacher may respond to the students' hypothetical question "Why should I?" by saying "Because you recognize that I value your culture and you will be better off in the future if you follow my advice."

The third type of authority, *rational-legal* has two dimensions: namely, *expert* (rational) and *official* (legal) authority (Clifton & Roberts, 1993). *Expert authority* is based on access to technical knowledge and experience which makes it sensible for students, irrespective of their cultural traditions, to comply with the requests of teachers within their areas of expertise and experience. Obviously, for an appeal to this type of authority to succeed, students must recognize their teachers' expert knowledge and its importance for their future lives, something that Waller (1965) suggests is problematic in modern schools. Young people living in traditional societies easily recognize the expertise of their parents and community elders, often because that expertise is immediately evident in their daily lives. In comparison, modern students often question the relevance of the subjects they are studying and the expertise of their teachers because of the tangential linkage between those subjects as they are presented in a lock-step program and the students' expectations for their future lives.

In contrast, *official authority* is inherent within a position in an organization: teachers, specifically, are granted status – the legal or official right to demand compliance from students – by virtue of the office they hold in modern, bureaucratically organized schools. Thus, in comparison with traditional societies where bureaucracies are nonexistent, teachers may appeal to both their office and their qualifications in legitimating the demands they make on students. In doing so, teachers would say something like "It is my right to ask for compliance and it is your duty to comply

because due process (that is, our legal responsibilities to each other) and rational considerations (that is, my expertise and experience) have been properly used to define our respective rights and obligations." In essence, both expert and official authority requires that students and teachers share objectives, irrespective of their cultures, that teachers possess the expertise and experience necessary for attaining the objectives, that teachers are empathetic to their students, and that both students and teachers cooperate within a bureaucratic structure, the school, that grants them rights and responsibilities (Bidwell, 2001; Bryk & Schneider, 2002).

By extending Weber's conceptualization, we can see that teachers have four interrelated dimensions of authority at their disposal in serving the educational need of students (Clifton & Roberts, 1993). Two dimensions, *legal* and *traditional*, are derived from the school bureaucracy, and the other two, *expertise* and *empathy*, are derived from the teachers' personality, education, and experience. These two pairs differ because bureaucratic authority rests on the apparent legitimacy of the organization while individual authority rests on the recognition of the teacher's expertise and experience. Using both, the educational performances of indigenous students – indeed of all students – can be improved by focusing on both bureaucratic authority and the individual authority.

Improving the Academic Performances of Indigenous Students

Generally, when students first enter classrooms, they encounter teachers whose cultural and professional dispositions are largely unknown, except, of course, by reputation. Consequently, at the beginning of the school year, teachers must rely, to a considerable extent, on the bureaucratic authority established in previous years, often by other teachers and administrators. For this reason, I present four recommendations designed to improve the bureaucratic authority of schools and then I present four recommendations designed to improve the individual authority of teachers; together I believe these eight recommendations can help indigenous students succeed academically.

Strengthening Bureaucratic Authority

Goodlad (1984, p. 29) notes that the objectives of schools are often unstated and may be as diverse as baby-sitting, offering wholesome meals, intellectual development, job preparation, sex education, and preserving the traditional cultures and languages of students. Schools simply cannot be expected to achieve such a diverse, often amorphous, and sometimes conflicting set of objectives without diluting – or completely undermining – their bureaucratic authority. Consequently, schools first need to establish a restricted set of clearly articulated and achievable objectives. Second, students, parents, and elders need to understand and, more importantly, agree that these objectives are the legitimate responsibility of the school. In other words, schools must limit their objectives to a manageable and achievable set that are related as closely as possible to the future requirements, both academic and social, of the students, and equally important, the students, their parents, and the community elders must agree that the objectives are legitimate (see Jordan, 1995; Kaomea, 2005; McCarty et al., 2005).

Goodlad's (1984) research also suggests that many important cultural, educational, and social goals are more diverse than schools can legitimately expect to achieve and, consequently, considerable work is required, by teachers, principals, parents, and elders, to keep schools from including those that detract from the ones that are truly educational and achievable. Similarly, objectives externally imposed by ministers of education and other high-ranking educational officials, sometimes in response to the political interests of various groups, engender less commitment than those that elders, parents, students, teachers, and principals – the people directly involved in the school and community – have established. In fact, considerable evidence shows that in order to obtain clearly articulated, defined, and accepted objectives, schools must be structured so that parents and elders, along with students, teachers, and principals, have greater responsibility in identifying the educational priorities (Bryk & Schneider, 2002).

Third, after the objectives have been established and agreed upon, it is important to define carefully and precisely the rights and responsibilities of students, teachers, principals, parents, and elders in helping indigenous students achieve this relatively narrow set of objectives (Bidwell, 2001; Bryk & Schneider, 2002). Essentially, the reciprocal responsibilities between students and teachers define the structure of the school, and to be credible, bureaucratic authority must be supported by clearly defined statuses with specified rights and responsibilities that are understood, accepted, and supported by members of the school and the community. That is, rules and expectations need to be clear and enforced. Obviously, students from traditional societies without bureaucratic structures can have difficulties with the unfamiliar, highly bureaucratic, structures in modern schools. As a consequence, indigenous students often need considerable support, encouragement, and empathy from their teachers, parents, and elders (Kleinfeld, 1995).

Finally, a systematic method of determining the success of the school in achieving those limited educational objectives needs to be established (Bryk & Schneider, 2002). Students, teachers, principals, parents, and the community generally, need to know if students are learning the curricula and if they will be adequately prepared for the complex and varied responsibilities they will assume in both the modern society and their traditional community. There is little use involving parents and elders in setting objectives and specifying authority relationships, statuses, roles, and responsibilities without then finding out how well schools are providing for the students' education and, where necessary, taking corrective action before problems become intractable.

These four recommendations suggest that principals, teachers, and students along with parents and elders, must cooperate in adapting the school bureaucracy so that all students, including indigenous students, their parents, and elders, can reasonably be expected to accept the legitimate authority of the school. Beyond improvements in the authority of the school, however, it is necessary to improve the authority of individual teachers. Consequently, the following four recommendations are aimed at enhancing the teachers' expertise and empathy.

Strengthening Individual Authority

First, teachers must be "culturally literate," to use Hirsch's (1988) words, in two realms. Teachers must demonstrate specialized expertise in their students' culture; that is, they must truly understand and appreciate their students' cultural norms and values. In addition, teachers must demonstrate expertise in the culture of the modern society and they must have specific expertise in the subjects they teach. On no account should teachers be teaching indigenous students – or any other students for that matter – if they do not understand or, worse, disrespect, their students' traditional culture (Kleinfeld, 1995). Nor should they be teaching outside the subjects in which they are knowledgeable and qualified. Teachers who do not understand their subjects will surely be recognized as insensitive, and those who do not understand their subjects will surely be recognized as incompetent (see Kleinfield, 1995), both of which will ultimately decrease their individual authority in the minds of students, parents, and elders.

Second, teachers must be well versed in pedagogy, human development, theories of learning, measuring achievement, and how to adapt their teaching practices to their students' indigenous culture (Bryk & Schneider, 2002, pp. 20–21). This knowledge is necessary if they are to be effective in planning, implementing, and assessing lessons and programs in ways that are compatible with the cultural, intellectual, and social development of their students. Not surprisingly, these are the core subjects that all teachers study in faculties of education, but unfortunately many programs treat cultural differences in a superficial way (see, e.g., Abu-Saad & Champagen, 2006; Bredemeier & Bredemeier, 1978, pp. 243–247; Clifton & Roberts, 1993; Kleinfeld, 1995).

Third, teachers must be knowledgeable about the social organization – both the culture and the structure – of classrooms, schools, and communities (see, e.g., Jessor, Colby, & Shweder, 1996; Stairs, 1994) because all teaching is a social and cultural activity, and to be successful, must be understood and practiced from both anthropological and sociological perspectives (Bidwell, 2001; Bryk & Schneider, 2002). This is particularly necessary when students from traditional communities are enrolled in modern bureaucratic schools (LaFrance, 1994; Stairs, 1994). Considerable evidence, in fact, suggests that teachers can use their understanding of the students' traditional ways of learning to become more effective in their own teaching (see, e.g., Kleinfeld, 1995; McCarty et al., 2005).

Finally, teachers must display genuine empathy toward their students. Good teachers genuinely understand and sincerely care about their students, irrespective of their own and their students' cultural heritages (Bryk & Scheider, 2002). As Noddings (1992) says, good teaching "touches the souls" of students. Empathy and caring about others is the first language that children understand, particularly if they do not share their teacher's culture, and it is the conduit by which everything else, including the subjects taught in school, is learned (Kleinfeld, 1995). Empathetic teachers are warm and supportive and do not threaten their students' identity and dignity (Clifton & Roberts, 1993). But, neither do empathetic teachers merely give students the cultural content with which they are already familiar. Rather, empathetic teachers take students beyond an understanding of their own particular culture and community to a larger view of modern societies and the mastery of the skills and knowledge they will need

to succeed in the future. Essentially, empathetic teachers in indigenous schools show students that they are respected, can learn the subject matter, and with dedication and work have the opportunity to become successful both in their tribal community and in the modern society.

Conclusion

To a considerable degree, indigenous students are often not successful academically because of colonialism and, more specifically, the differences between the authority structure of their society and the authority structure of modern schools (see Champagne & Abu-Saad, 2006; Jordan, 1995; Kleinfeld, 1995). For this reason, schools need to be organized so that both nonindigenous teachers and indigenous students see each other as being legitimate and can cooperate within a bureaucratic structure that is also seen as being legitimate. Neither traditional socialization delivered by parents and elders nor education based entirely on the bureaucratic authority of schools is effective in preparing indigenous students to live successfully in modern societies. To create more effective schools, bureaucracies that are sensitive to the culture of indigenous students, their parents, elders, and communities are required, but so are truly empathetic teachers and administrators who are skilled in teaching their subjects. In such schools, students, teachers, and principals, along with parents and elders will recognize their interdependence as they work toward achieving a relatively restricted and well-defined set of shared objectives that are relevant culturally and significant educationally. When this happens, indigenous students are more likely to engage in school work that is important and challenging, and to demonstrate that they are academically competent, all of which will help them become successful educationally, economically, and socially in modern societies such as Australia, Canada, and the United States.

Biographical Note

Rodney A. Clifton, B.Ed., M.Ed. (Alberta), Ph.D. (Toronto), Fil. Dr. (Stockholm) specializes in sociology of education and educational policy. He is a Professor in the Faculty of Education and a Senior Fellow at St. John's College, University of Manitoba. Over the last 35 years he has published 150 articles and written or coauthored six books including *Socioeconomic Status, Attitudes, and Educational Performances: A Comparison of Students in England and New Zealand, Authority in Classrooms, Crosscurrents: Contemporary Canadian Educational Issues,* and *Recent Social Trends in Canada, 1960–2000.* In addition, he has been awarded a Spencer Fellowship from the International Association for the Evaluation of Educational Achievement, an Rh. Award from the University of Manitoba, an R.W.B. Jackson Research Award from the Canadian Educational Researchers' Association, and both an Edward Sheffield and a Distinguished Research Awards from the Canadian Society for the Study of Higher Education.

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SINGLE-SEX OR COEDUCATIONAL CLASSES

Peter W. Cookson, Jr.

Introduction

Until the mid-nineteenth century, it was generally assumed by educators, parents and philosophers that girls and boys should be educated separately and differently. In patriarchal societies it seemed "natural" that girls should be educated primarily for domestic life and boys should be educated for business and public life. This division of emotional, economic and social labor, however, began to become unraveled with the spread of public education, the growth of the suffragette movement and the introduction of women into the labor force. In the public school sector these trends prompted a movement toward coeducation in the latter part of the nineteenth century and the early part of the twentieth century. Most of private education, which at that time was heavily represented by religious orders, remained committed to single sex education. Even within the public sector, however, some segregation of the sexes remained through tracking (girls were often directed into nonacademic programs), schools emphasized boys' sports and there was, in general, a lack of support for girls to excel academically, particularly in math and science. There was a public acceptance of coeducation because it was seen as providing equality of opportunity, even though the data concerning the gap between female and male achievement belied such comfortable assumptions.

In the 1960s, however, a reconstituted feminism began to influence public policy; women advocates argued for equality of opportunity for girls and young women and in 1972 Title IX of the Federal Educational Amendments were passed requiring equal funding and equal opportunities for female public school students. Had equality of opportunity been achieved in the 1970s, the story might have ended, but it didn't. Several unexpected events reenlivened the debate concerning single-sex and coeducation. First, the achievement of girls in the latter part of the twentieth century and the early part of the twenty-first century became evident on a number of different measures including grades, graduation rates from high school and college attendance rates; second, there was a relative academic decline for boys during the same period; and third, there developed a new area of research – the human brain. These trends have caused some educators and public policy advocates to repudiate coeducation in total or in part and there has been a great deal of discussion about the merits of single-sex education in the scholarly and popular

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching*, 919–927. © Springer Science+Business Media LLC 2009 literatures (Brutscest & Van Houtte, 2000; Haag, 1998; Harker, 2000; Gurian, 2001; Lee, Marks, & Byrd, 1994; Mael, 1998; Smithers & Robinson, 2006).

In this chapter, I examine the evidence concerning the need for and the reported efficacy of single-sex education. I emphasize the differences in single-sex or coeducational classes rather than single-sex schools versus coeducational schools. I also examine some of the implications of these findings for classroom teachers in terms of their pedagogical practices.

What Do We Know from Research?

Traditionally, research findings seldom reveal a single, large, unambiguous conclusion around which an overwhelming number of researchers can agree. This is true in the case of comparing single-sex and coeducational classrooms. Because of sampling differences, data analysis differences and contextual differences, studies of singlesex versus coeducational classrooms has not yielded a clear set of conclusions.

This ambiguity has not stopped the advocates of single-sex education from promoting their point-of-view. Perhaps the most consistent of these voices is the National Association for Single Sex Public Education. The Association's executive director, Leonard Sax, argues strongly that the data concerning single-sex schools and classrooms versus coeducational schools and classrooms is unequivocal. To support his position, he sites several major studies including a National Foundation for Educational Research study, an Australian Council for Educational Research study, and a 1980s study conducted in Jamaica, West Indies (National Association for Single Sex Public Education, 2007). In addition, Sax reviews several smaller studies and finds the overwhelming weight of the evidence in support of single-sex education in terms of academic achievement and social and emotional adjustment.

These positive findings, however, are only mildly echoed by Pamela Haag in her 1998 metaanalysis of single-sex versus coed studies. In a review that was commissioned by the American Association of University Women Educational Foundation, Haag came to these conclusions:

Studies of attitudinal variables yielded some consistent findings, including differences in specific domains of self-concept between girls in single-and-mixedsex schools (but no overall differences), and findings that support the view that single-sex contexts foster less stereotypical views of subjects. Studies also concur that students perceive single-sex school environments to be more orderly.

Other studies have not claimed positive achievement effects for single-sex programs. Although research finds that girls view the single-sex classroom as more conductive to learning, research fails to confirm significant gain in girls' math and science achievement in the single-sex classroom. (Haag, 1998, p. 3)

In one of the most comprehensive studies of single-sex classes within coeducational schools, researcher Barbara Watterston of Western Australia University outlines the issues that drive the debate:

- Both boys and girls in lower secondary single-sex physical education classes felt less concerned with body image and performing in front of the opposite sex.
- Students in single-sex health classes discussed issues of sexuality more openly. Teachers felt that the dynamics in the boys' class changed particularly as they didn't feel the need to 'show off'. Both sexes tended to take more risks in their conversations allowing for greater depth in discussions.
- Boys wanted to stay in their single-sex literacy classes where lessons suited their learning styles and engage them in their areas of interest. Assessment tasks focused more on the oral than the written. Girls' achievement also continued to improve, as their learning environment was less disruptive.
- Teachers indicated that they were keen to participate in single-sex classes and had endeavored to research strategies and practices prior to commencing. Whilst intensely rewarding, teachers of all boy classes generally felt these classes were more difficult to teach than all girl classes.
- Teachers felt that single-sex classes helped to improve self-esteem as they worked towards breaking down undesirable stereotypical behavior. They also noted an increase in verbal skills as all boys' and all girls' voices are heard.
- Parents noted the impact of single-sex classes was reflected in the happy and more relaxed demeanor of their children who had developed a greater sense of worth.
- Students tended to enjoy the opportunity to work in single-sex groupings and felt they were achieving better results, were less distracted and more confident.
- A small proportion of students did not enjoy being part of a single-sex class. Alternatively many spoke positively about the opportunity to work in single-sex groupings whilst also welcoming a regular return to a coeducational class. (Watterston, 2007, p. 5)

Watterston, after examining the evidence, concludes:

It appears a flexible approach to establishing single-sex classes is paramount. It is important to acknowledge that there is no one best fit for the way in which these classes are timetabled within the primary or secondary school structures. As we are flexible and proactive when tending to the needs of each individual student, so too we need to consider issues of time, content, whole school and teacher resources when implementing single-sex strategies, which are unique to each classroom and school. All stakeholders (teachers, parents and students) must have a choice as to whether or not they participate. (Watterston, 2007, p. 12)

The theme of teacher participation is echoed by Amanda Barton of the University of Manchester in her 2002 article, "Teaching Modern Foreign Languages to Single-Sex Classrooms." She concludes:

The most striking feature of the teacher perceptions collected in this research is the broad diversity of opinion. While these teachers are, it seems, agreed on a principle argument for establishing single-sex groups – boys' and girls' differing learning styles – they are by no means united in their views on the success of such initiatives.

The greatest differences in opinion are, it seems, to be found amongst teachers of boys' groups. While the majority of girls' teachers agree that the setting is effective, particularly in terms of improving girls' assertiveness and speaking skills, perceptions of boys' performance in single-sex groups vary widely. An improvement in boys' performance in these groups seems to be dependent on a complex chemistry of independent variables including the age of the pupils, ability setting, class size and, most importantly, the relationship with the teacher and their teaching style. (Barton, 2002, p. 13)

Perhaps one of the major studies of single-sex and coeducational schooling was undertaken by Alan Smithers and Pamela Robinson of the University of Buckingham in 2006. They examined the latest evidence on educating boys and girls together or separately, either in different schools or separate classes. They examined the evidence concerning academic achievement, subject choice, separate classrooms, behavior and emotional development, views of pupils and teachers, parental preferences, and transition to university. Their overall assessment of their review of the literature was as follows:

While gender composition is one of the most obvious features of a school, and has attracted a lot of research, it is not necessarily an important factor in a school's success, however judged. Indeed the evidence seems to suggest otherwise. The main determinants of a schools' performance are the ability and social background of the pupils. It is only after these have been taken into account that school factors such as leadership and teacher expertise come into play. The gender mix is only one of the school factors and its effects, if any, are usually not strong enough to be detected by the methods of educational research. Whether to mix or separate the sexes in education is an issue that arouses strong feelings, but on which there is little conclusive evidence. Herein lays the paradox: people 'know' one or the other is better but cannot prove it. (Smithers & Robinson, 2006, p. iii)

If Smithers and Robinson are correct in their conclusions, we might be safe in assuming that the entire debate about single-sex and coeducation is something of a tempest in a teapot except, as they point out, that despite the existence of little hard data to support single-sex education, many astute people "know" it's important but can't prove it.

Perhaps teachers, administrators and parents know it because simple observation informs us that there are significant differences between boys and girls learning styles. Recently, the study of human brain function has revealed some striking differences between the organization of the male and female brain and some have argued that these differences affect learning styles, responses to stimuli, and a general orientation to the world. The interaction between the organization of the brain and the differences between male and female hormonal inheritances results in some striking differences in how girls and boys and young women and young men respond to the classroom environment. What historically has been "common sense" is now being questioned, expanded and researched through new technologies. The most well-known researcher and popularizer in the field of sex differences in learning styles is Michael Gurian whose 2001 book, *Boys and Girls Learn Differently* is a best seller. Gurian begins his book with a review of the scientific evidence that supports measurable differences in male and female brain organization and processes. In all, he identifies 35 aspects of brain function that distinguishes a female way of knowing from a male way of knowing. Some of these differences are hardwired into the brain. For instance, he identifies differences in the cerebral cortex between males and females and, based on the density of the neurons on either the left or the right side of the brain, asserts that males tend to be right-brain dominant and females tend to be left-brain dominant. This difference he argues influences learning styles. Another example is the cerebellum which contains neurons that connect to other parts of the brain and spinal cord and facilitate smooth precise movement, balance and speech. Female brains tend to have stronger connecting pathways between brain regions and, as a consequence, have superior language and fine motor skills when compared to men.

Gurian also discusses chemical differences in the male and female brain. For example, the male brain secretes less serotonin than the female brain making males, according to Gurian, "impulsive in general, as well as fidgety" (2001, p. 28). Obviously, males and females differ in terms of their hormonal organization; females tend to be dominated by estrogen and progesterone and males by testosterone. Progesterone is a female growth hormone and also the bonding hormone. Whereas a girl might be likely to bond first and ask questions later, a boy might be aggressive first and ask questions later. A girl is more likely to manage social bonds in a group through egalitarian alliances, but a boy is more likely to manage social complexity by striving for dominance.

Gurian goes on to argue that these differences between the male and female brain are highly significant, are the product of evolution, and strongly influence a different developmental pathway between males and females. He traces out these differing developmental cycles from prebirth through high school. Many of his observations have been noted by others, yet when he makes these differences explicit, many of these developmental differences seem far more than incidental or of secondary importance. In the nature versus nurture argument, Gurian leans heavily toward the former rather than the latter, although he recognizes that the social context in which children develop produces gender differences; how people treat boys and girls has an enormous influence on their intellectual and emotional development above and beyond biological differences. Gurian makes note that boys' learning challenges seem to be becoming more pronounced and, in particular, their antisocial behavior has increased dramatically. Whereas 30 years ago the gender gap referred to the socially produced underperformance of girls, today it is the underperformance of boys that appears to be significant.

How do these differences in male–female brain development translate into learning-style differences? Gurian identifies ten specific areas of difference: Deductive and inductive reasoning, abstract and concrete reasoning, use of language, logic and evidence, the likelihood of boredom, use of space, movement, sensitivity and group dynamics, use of symbolism and use of learning teams. Based on these differences in learning styles, Gurian recommends a whole set of pedagogical strategies that would enhance the learning of boys and girls. The danger in some of this research is that small differences can be overstated and biological determinism as an educational strategy is full of ethical pitfalls. It can result in segregating males from females and creating a "scientifically" based sexism that could have unethical and unproductive consequences in the classroom. In much of his work, Gurian goes on to identify disadvantages and advantages for both boys and girls, but it is difficult to factor out what is gender based and what is socially based. Thus, for instance, when Gurian states that 90% of the discipline problems in schools are attributable to boys, it may be useful to examine the definition of discipline rather than assume that boys are somehow genetically programmed to misbehave. Likewise, we need to take care not to assume that because 60% of the college population is now female, it is due to some brain based behavior; it might well be that changes in the economy are restructuring higher education which would explain the serge in female enrollment in higher education. In short, any single explanation of male and female learning in the classroom must be tested against alternative explanations and subjected to critical examination.

Nonetheless, the working hypothesis that boys and girls learn differently does have some bearing in our discussion concerning single-sex versus coed classes because there may be specific subjects or specific situations where segregating the sexes, even for a brief time, may result in higher achievement or better social functioning.

Lessons from the Research

How can the research summarized above be used for organizing classrooms or by teachers? As we learned from the research discussed earlier, the sexual composition of a school or of a classroom is but one factor in determining whether or not an exciting and effective learning community has been developed. Moreover, gender is a social construction, composed of numerous components. All human beings fall on a continuum in terms of gender and, of course, all human beings share a great deal in common with members of the opposite sex. At times, differences can be magnified, even reified. Nonetheless, taken as a whole, there are some lessons that we can draw from the research and from experience. In this section, we apply some of these findings to specific elements of learning environments and pedagogy.

Creating Effective Learning Environments

In this essay we have not explicitly compared single-sex schools with coed schools; from Haag's 1998 review of the literature we can see that the verdict is still out concerning the effectiveness of single-sex schools. Despite the strong arguments put forth by the National Association for Single Sex Public Education, sophisticated analyses make simple conclusions suspect. Several years ago the state of California evaluated twelve public single-sex schools. In the late 1990s California had more single-sex public schools than any other state in the union. As it turned out, most of these single-sex schools closed because they were not particularly successful in empowering students, breaking down stereotypes, and improving academic performance. The study concluded "single gender, public academies need to guard against becoming

a new form of tracking or resegregation" (Zwerling, 2001). In all likelihood, singlesex schools in the United States will continue to be an experiment in the public sector and remain a stronghold in some parts of the private school sector. There are still socially elite single-sex schools and there is still a system of Roman Catholic singlesex schools that appear to be able to sustain themselves over time.

Next we examine schools that are partially single-sex. In his study, Gurian (2001, p. 203) advocates that middle school is an optimal time for single-sex education, or as he would call it, separate-sex education. He argues the following:

Middle school is the time of greatest hormonal upheaval in both males and females. Boys begin puberty with high dosages of testosterone. Over just a few years, they need to learn to manage up to twenty times as much of this sexand-aggression hormone as females. Middle school boys often find themselves in strange moods, angry, aggressive, clumsy and awkward, unable to verbalize feelings, focused on girls but scared of them, competing against boys for the attention of girls, and relatively unable to verbally discern the complexities of their own developing nature. (2001, p. 205)

Girls also go through a period of upheaval in middle school because of their changed hormonal picture. They experience mood swings, vacillation in self-confidence, hyperattention to how they fit into the world of other girls, and competition with other girls for boy's attention. Because of this, Gurian believes that middle school is a good time to separate boys and girls and gives several examples in his book of schools that have done so with success. Of course, there are many other factors in making a middle school successful, but in terms of policy and practice there may be some rational for the separation of the sexes during early adolescence.

We have examined in some depth the research examining single-sex classrooms in coeducational settings. Watterston (2007) and others have concluded that there is no magic bullet concerning the efficacy of single-sex classrooms. Interestingly enough, Watterston emphasizes the importance of teacher participation in establishing single-sex classrooms. Essentially, Watterston and others believe that single-sex classrooms can increase student learning and social adjustment if it is part of an overall strategy to implement policies based on principles of equity. Perhaps the greatest value in single-sex classrooms within a coeducational setting is that it helps students explore the complexities and contradictions in gender relations in a new way and with a greater amount of intellectual and emotional freedom.

Finally, there has been a considerable amount of discussion concerning the separation of the sexes for particular subjects. Historically, girls and young women have not succeeded in math and science at the rate or level that would be expected, given their general ability. There is some evidence that single-sex classrooms are beneficial to girls and young women in the area of science and math (Gillibrand, 1999). There is also some evidence that single-sex classrooms can be useful in the teaching of foreign languages (Barton, 2002). This research is far from definitive but it is consistent enough so that experiments in single-sex classrooms in particular subjects may be successful and increase student learning.

In sum, single-sex versus coed classrooms is not a subject that lends itself to simple positive or negative answers. It may well be that a more nuanced approach at the school level or the school district level may be a superior strategy. It seems evident that there is a balance to be achieved which takes into consideration the differing developmental cycles of boys and girls and takes into account the differing social needs of boys and girls at different stages of their growth. An improvement strategy which includes the whole community and unites single-sex or coed strategies with a host of other programs and teaching methods is most likely to be successful.

Pedagogical Strategies

Generally speaking, there is little agreement concerning specific pedagogical strategies that can be used for teaching boys and girls and young men and young women differently (Gray & Wilson, 2006). Gurian and his colleagues argue that there are teaching strategies that are gender specific. At the middle and high school levels he makes the following suggestions for boys: increase group work and pair work, increase character education, talk about and model "heroic" behavior, offer rite-of-passage experiences, provide boys with quick tension release strategies, teach sexual ethics in all applicable courses, carry out consistently applied discipline systems and bring in mentors from the community. For girls, Gurian and his colleagues suggest: call on young men and young women equally, teach all subjects with the use of multisensory strategies, provide female role models, offer girl's rite-of-passage experiences, give girls hands-on methods for learning math, teach character education, maintain high expectations and bring mentors in from the community.

While the research in this area is still in its formative stages, it seems fair to say that a clearer articulation of what teaching methods are favorable to boys' learning and what methods are favorable to girls' learning is well worth exploring, whether a classroom is single-sex or coeducational.

Conclusion

As in many areas of human experience, we have a natural tendency to seek simple solutions to complex challenges. In the study of single-sex versus coeducation, it does not appear that there are any simple conclusions that we can draw from the literature or from experience. What we do know is that a well-conceptualized strategy combined with other school improvement strategies is likely to lead to improved student learning and better social adjustment. Some of this is common sense that is shared in virtually all societies; however, with the development of brain research and school-based experiments, we can be confident that in the coming years continued research and experimentation in the area of single-sex classrooms within coeducational environments will continue to yield intriguing and important results.

Biographical Note

Peter W. Cookson, Jr., is the author of many books and articles on educational reform and improved classroom practices. He has been a teacher since the early 1970s and most recently served as Dean of the Graduate School of Education and Counseling at Lewis and Clark College. He is currently developing a web-based interdisciplinary social studies curriculum and completing a book on twenty-first century education.

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TEACHING AND THE BOY PROBLEM

Rob Gilbert

Introduction

Education has traditionally institutionalized the dominant social and economic role of men in society, and the early history of teaching in schools and universities in the English speaking world is largely one of preparing 'gentlemen' for positions of leadership. However, there is now a concern in many education systems that boys are not succeeding in school as much as they should. This has led to a concerted focus in education policy and debate on boys' achievement in school, with numerous research studies and government inquiries seeking to understand this issue.

What Is the Problem?

Government reports and other studies have investigated issues affecting the education of boys and recommended ways to improve their academic and social outcomes in Australia (House of Representatives Standing Committee on Education and Training, 2002), the United Kingdom (Department for Education and Skills, 2007), New Zealand (New Zealand Education Review Office, 2000), Canada (Quebec Ministry of Education, 2004) and the United States of America (Kimmel, 2000).

The key reason for this concern is that, when compared with girls' school achievement, boys in these countries tend to perform less well on a range of measures. A recent United Kingdom summary is typical of the situation. The report (Department for Education and Skills, 2007) observed that, in terms of examination performance, girls tend to do better in the majority of subjects, with the largest differences being in the humanities, arts and languages. In science and maths, differences are much smaller. There are also marked differences in subject choices, with gender stereotypical choices affecting the distribution across subjects. Boys are less likely to continue to the end of secondary school, and perform less well than girls in general, though differences in the senior years are less than in younger student groups.

At an international level, the 2003 Programme for International Student Assessment (PISA) showed significantly better performance among girls in literacy, but in most countries boys performed better than girls in mathematics, while there were no systematic

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differences in science. These traditional patterns are problematic as they reflect and reproduce stereotypically narrow curriculum choices by many boys and girls. In the case of boys, these stereotypes are seen as incompatible with employment trends towards professional, service and culture industries which require a more literate workforce.

These broad comparisons between boys and girls have dominated discussion of this issue in the popular debate, to the point where some authors point to a 'moral panic' over the issue (Lingard, 2003, p. 50; Smith, 2003, p. 283; Titus, 2004, p. 145) and the intrusion of a backlash against gender equity for girls (Mills, 2003). One consequence of this is that simple comparisons of achievement aggregated by sex disguise the complexity of the issue, and commentators have warned that a number of caveats need to be entered if the problems are to be adequately understood. These include the fact that sex differences are much less important than class, race or ethnicity in influencing achievement; that some boys perform very well in school, so that the key focus needs to be on which boys are not achieving rather than on boys as a group; and that a concern to improve boys' achievement should not lead to neglect of the needs of girls (Connolly, 2004; Francis & Skelton, 2005; Younger & Warrington, 2007).

Much attention has been given to boys' school behaviour, where studies have analyzed their rejection of school norms relating to authority and academic achievement (Harris, Wallace, & Rudduck, 1993), their unwillingness to collaborate to learn (Barker, 1997) or their out-of-school activities (Downey & Vogt Yuan, 2005). Other studies have identified differences in boys' attitudes to work, and their goals and aspirations (Younger, Warrington, & Williams, 1999; Younger & Warrington, 2002).

What Explanations Are Offered?

Explanations of these problems are varied (Weaver-Hightower, 2003). Some have argued that they are biological, most recently attributing boys' lower achievement to brain differences (Gurian, 2001). However, such brain-based explanations have been criticized as poor interpretations of evidence and as exaggerating the significance of the differences (Centre for Educational Research and Innovation, 2007; Geake, 2008; Willingham, 2006). Also important is the fact that these approaches fail to explain historical, cultural and international differences in patterns of performance. For instance, it has been argued that national differences in the relative performance of boys and girls are related to the degree of gender equity in the countries concerned (Guiso, Monte, Sapienza, & Zingales, 2008).

More relevant than these biological comparisons between the sexes are those aspects of boys' disengagement with schooling which are subject to influence through teaching. This has led to a focus on boys' motivations, interests and relationship to school learning. Of particular significance is the large body of research into the socio-cultural influences on boys' behaviour and school engagement which are associated with the construction of masculinity. These studies have identified cultural norms among certain forms of masculinity which conflict with the ethos of schools (Connell, 1996; Mac an Ghaill, 1994; Paechter, 2007). The research describes boys'

anti-school behaviour as part of their attempt to construct a macho or 'laddish' form of masculinity (Jackson, 2002, 2003; Francis, 2000), though it is important not to demonize boys in such analysis (Francis, 2006).

This approach draws attention to the active processes by which masculine cultures are developed, negotiated and sustained by the relationships among students, teachers and institutional practices, and how they affect boys' academic engagement and compliance with or resistance to school expectations. It recognizes the varied needs of different boys arising from the construction of masculine identities and how these relate to the cultures of schooling (Gilbert & Gilbert, 1998). This has led to increasing recognition of the intersections between the construction of masculinities and the experience of other forms of identity and difference, especially race and sexuality (Lesko, 2000; Martino & Meyenn, 2001).

Strategies for Boys' Education

Given the complexity of the issues which have been identified in the research and policy debates, it is not surprising that there has been a diverse range of responses by educators. One classification of approaches to teaching boys distinguishes pedagogic approaches focusing on particular teaching activities thought to be successful for boys; individual approaches to boy's learning needs through strategies like target-setting and mentoring; organizational initiatives at the whole school level; and socio-cultural approaches which address attitudinal issues by trying to create relationships and an environment for learning which engages boys and girls (Younger et al., 2005).

A large number of studies have sought to identify those classroom teaching practices which might lead to improved engagement and performance for boys. The striking feature of the recommended practices is that they constitute what might simply be called good teaching. Also notable is the wide range of activities which schools have found to be effective.

A common research strategy has been for researchers to identify schools which, on evidence such as examination performance, seem to have been successful in bringing boys to desirable levels of achievement (Frater, 2000; Lindsay & Muijs, 2006). Some schools have programs specifically targeted at boys at risk of or actually underachieving, such as separate classes, while others take a whole-school approach with no specific support for or separate treatment of particular groups, but rather an emphasis on a school culture which establishes for all students high expectations and an ethos of achievement. Both have been shown to be effective.

In terms of curriculum, successful schools recognize the importance of a broad and diverse curriculum which connects with the students' cultures, and which maximizes interest and challenge. They do not favour special options for low achievers as this risks reducing self-esteem and motivation, though exceptions occur in the case of targeted literacy programs.

Pedagogy is another area where a diverse range of strategies can be effective, though their impact depends on their being integrated into an overall plan for the school as a whole. Effective schools promote a broad range of boys' intellectual, cultural and aesthetic experiences and achievements, including extra-curricular activities such as drama, debating and music (Ofsted, 2003a; Younger & Warrington, 2007). In their study of successful literacy teaching strategies for boys, Younger et al. (2005) found little support for the popular notion that boys have distinctive learning styles, such as a preference for kinaesthetic learning. Rather, a holistic approach to learning was recommended, where students were led to understand that different learning styles existed, and that to be successful learners, they needed to access different approaches to learning at different times. The recommended pedagogy included interactive class-room activities suited to particular purposes, so that both short, focused activities and more sustained, open-ended activities are used, as and when appropriate. Also recommended was the integration of activities of speaking, listening and writing, along with working with peer partners and groups and the use of information and communication technologies.

Common among reports of successful schools is a close attention to performance monitoring. Monitoring of individual student achievement, attendance, engagement and behaviour was a feature of their commitment to ensure that students' needs were identified and acted on through additional support. Information about each individual allowed schools to set challenging but realistic targets. It also allowed achievement to be celebrated through displays and rewards. There was a strong emphasis on behaviour management, but no single model was used, other than that successful programs seemed to combine strong discipline with genuine concern and caring for students.

Individual strategies support boys' learning not only in terms of special academic support, but also by addressing boys' relationships with school learning. Among the strategies here are role modelling, mentoring and target setting. Role modelling activities identify and promote individuals whose experiences and achievements are expected to inspire young people to seek similar success. The key challenge here is to ensure that individuals chosen as role models are seen by students to be relevant to their own needs and interests (McCallum & Beltman, 2002). Support for change is important, and the extension of role modelling into a continuing mentoring approach is likely to be more effective.

Mentoring is a strategy which addresses the need for social support and experience in a range of contexts beyond the traditional teacher-student classroom relationship. It attempts to broaden boys' contacts, networks and relationships, to augment the school authority relationships, which some boys find constraining, and to compensate for any gaps or breakdowns in boys' school, family or social experiences and relationships which might hinder engagement and learning. It is primarily a learning relationship, but central to it is a focus on establishing trust, social support and networks, and a cooperative approach to work and learning (Herrera, Sipe, & McClanahan, 2000).

The different needs of various groups have given rise to mentoring programs with a range of purposes (Hartley, 2004; Jekielek, Moore, & Hair, 2002; Philip & Hendry, 1996). While not mutually exclusive, these include task oriented forms of mentoring, such as apprenticeships or engaging boys with older people to assist with learning to read; mentoring aimed at establishing networks, such as assisting the transition to work and networking for employment opportunities; mentoring for social inclusion for isolated individuals or groups, including community involvement, social, leisure and sporting programs; involving boys in community projects which aim to establish a sense of agency and engagement; and the rehabilitation of students who may have been cut off or excluded from school for some reason, where personal support and pastoral care are the chief focus.

As with other strategies, these individually targeted programs are likely to be effective only if they are integrated with an overall plan to engage students on a number of dimensions. This means that the entire ethos, culture and organization of the school needs to be focused on creating engaging environments. One organizational strategy which has attracted much debate, but much less conclusive research, is the question of single-sex schools or classes as a means of improving boys' engagement and performance. The evidence on this is quite contradictory. Some studies report that single-sex classes or schools reduce disruptive behaviour (Sukhnandan, Lee, & Kelleher, 2000) and improve achievement (Malacova, 2007; Woodward, Fergusson, & Horwood, 1999). Others have found that single-sex classes increase boys' confidence in discussing gender stereotypes and response to literature (Martino & Meyenn, 2002; Younger & Warrington, 2003).

However, other research finds no positive effect on academic achievement, and evidence of greater behavioural problems in boys only classes (Jackson, 2002: Quebec Ministry of Education, 2004; Spielhofer, O'Donnell, Benton, & Schagen, 2002). As Munns et al. (2006) point out, the research on single-sex classes has neglected other important issues, including the social construction of gender identities, and the implications of boys' only classes for curriculum choices, pedagogies and assessment practices. Without such consideration, improved outcomes are unlikely, but could reinforce learning-related stereotypes of boys and girls among both teachers and students (Younger & Warrington, 2007). The research on single-sex schools is complicated by the variations in year level, school type and the extent to which studies include student background variables and value added measures (Malacova, 2007).

A related issue here is the claim that boys respond better to male teachers, but the evidence for this is not compelling. While a large scale study of 1988 data found that having a male teacher improved boys' literacy learning (Dee, 2007), more focused recent studies have not supported this. A study of 413 classes of 11-year-old children in the UK found no evidence that male teachers were more effective with boys, or female teachers with girls (Carrington, Tymms, & Merrell, 2008). The only links with the gender of the teacher were when student attitudes to school were analyzed. A strong statistically significant result was that both boys and girls who had female teachers had more positive attitudes to school (though not to learning particular subjects). Similar results were found in the US by Sokal, Katz, Chaszewski, and Wojcik, who reported a study of an individualized reading intervention program for third- and fourth-grade boys (Sokal et al., 2007). The study found that boys' achievement was not related to the sex of the teacher. However, struggling readers developed more positive self-perceptions as readers when they worked with female teachers.

These studies highlight the importance of interpersonal relationships between boys and school personnel. Younger et al. (2005) studied schools identified as having successful programs for boys, and found a range of socio-cultural strategies designed to engage boys more positively with school life. These included citizenship initiatives like school councils, group projects beyond the classroom, peer reading schemes, drama productions involving disengaged boys, and a form of peer mentoring in which leading peer group figures befriend marginalized or alienated boys. More general strategies aimed to create school climates which clarified expectations by monitoring and responding more effectively to attendance and behavioural problems, and to ensure opportunities for students to make choices about activities which would allow them to achieve success by recognizing their strengths. The study reported that such strategies generated a sense of inclusiveness and responsibility for underachieving students, increased their confidence and self-image, and improved their engagement and academic achievement. From evidence gained in discussions with boys and class observations, Francis (2000) reported that strategies which critiqued anti-social masculinities and gender stereotypes were also effective in addressing boys' engagement.

These links between school-related attitudes and gender stereotypes point to the importance of the broader social and cultural milieu in which boys' attitudes to school are formed. There has been considerable research into the importance for boys' motivation, engagement and school outcomes of the links between family and school. There is broad evidence of the relationship between family involvement in schools and academic improvement, especially for students from educationally disadvantaged backgrounds (Deslandes & Cloutier, 2002; James, Jurich, & Estes, 2001; Lingard, Martino, Mills, & Bahr, 2002; Ofsted, 2002, 2003a). For instance, examples of family involvement found to be successful in literacy development have included home–school reading diaries, parental involvement in classes and improved information for families about the school's approach to literacy (Ofsted, 2003b). Programs which have addressed this have paid particular attention to the need to increase fathers' involvement in education (Green, 2003; Quebec Ministry of Education, 2004).

Implications for Teaching

The recent growth of research and development in boys' education has been striking. Some of it has been unproductive, searching for essential biological or psychological characteristics which might guide teaching. These essentialist approaches have proven to be fruitless, and even counterproductive, in that the evidence to support them is not convincing, and the popular attention given to them has entrenched simplistic beliefs and stereotypes.

This chapter has identified a wealth of strategies for improving boys' engagement and achievement at school. Teachers who would maximize boys' chances of success with school learning need to be aware of the various strategies available, but central to them all is the need to appreciate the perspectives of the boys themselves. Slade and Trent (2000) interviewed 1,800 boys ranging in age from 13 to 16, and asked them to define a good teacher. The general view was that good teachers treat boys fairly, and in a relaxed and respectful manner, rather than singling individuals out for criticism. They are flexible in adjusting rules to meet individual needs, and try to make work interesting. Good teachers distinguish between boys' behaviour and their potential to learn, and allow boys some freedom in classroom activities. The boys respected teachers who gave priority to these matters, rather than to school rules or their own personal preferences, and who showed a genuine commitment to democratic classroom practice.

Boys are positioned in particular ways by the interactions of class, race, ethnicity and the experience of growing to be men. This occurs in a cultural context which promotes experiences and expectations which can augment or limit their potential for school learning. Appreciating the challenges presented by this process is crucial if educators are to understand how boys form their concepts of themselves in relation to the expectations of school.

Biographical Note

Rob Gilbert, BA, BEd (Queensland), PhD (London), is Professor of Education at The University of Queensland, Australia. His research addresses issues of curriculum theory, development and evaluation in a range of fields and levels of education, including social and environmental education, education for citizenship, gender in education, the education of boys, standards based curriculum and assessment and research training. His research draws on socio-cultural perspectives on education and educational contexts, and concepts from the sociology of knowledge and the curriculum, and discourse theory.

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Section 10

THE TEACHING OF INDIVIDUAL SUBJECTS

THE TEACHING OF READING

Barbara R. Foorman and Kristi L. Santi

Introduction

Recent international studies of reading have expanded our understanding of how writing systems (orthographies) map onto spoken language (phonology) and the processes by which understanding of written language occurs (Rayner, Foorman, Perfetti, Pesetsky, & Seidenberg, 2001; Snowling & Hulme, 2005). From an international perspective, the teaching of reading is first and foremost a matter of grain size – the size of the orthographic unit that maps to the relevant phonological unit. Ziegler and Goswami (2005) argue that in English alphabetic letters map to multiple phonological units – whole words, onsets and rimes, and phonemes, and that, consequently, learning to read in English is more complex than learning to read in languages with a match in grain size, such as Finnish, Italian, Spanish, German, and Greek (Seymour, Aro, & Erskine, 2003).

In the United States, the teaching of reading has become a matter of public policy with the passage of the No Child Left Behind Act of 2001 (NCLB; Public Law No. 107–110) and its provisions for closing the achievement gap between advantaged and disadvantaged children by holding schools accountable for achievement results and requiring that teachers be highly qualified (Foorman, Kalinowski, & Sexton, 2007). The Reading First component of NCLB targets beginning reading instruction and is based on consensus documents summarizing over 30 years of research (National Institute of Child Health and Human Development, 2000; National Research Council, 1998; RAND Reading Study Group, 2002). In this chapter we have two broad objectives to (a) explain what is known scientifically about learning to read English, and (b) summarize research on reading instruction.

The Scientific Base for Learning to Read

In this section we will first describe the challenges in learning to read in various orthographies in the world and the particular challenges of learning to read English. Then we will describe phonics instruction and discuss "The Great Debate" (Chall, 1967) of code-emphasis versus meaning-emphasis instruction in reading English.

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Mastering the Alphabetic System

Around the world formal reading instruction begins between the ages of 5 and 7 and focuses initially on mastering the relations among sound segments in speech and graphic symbols in the writing system. The writing systems of the world consist of various orthographies that map graphic symbols onto various levels of speech. For example, in English, we map 26 letters of the alphabet onto 40 minimal units of speech called phonemes. This alphabetic orthography stands in contrast to syllabic orthographies that map graphic symbols to syllables and in contrast to logographic orthographies that map graphic symbols called characters to morphemes. The writing system for some languages consists of multiple orthographies. Japanese is a classic example with three orthographies, two syllabic and one logographic. One syllabary, called hiragana, was invented in the ninth century to grammatically relate spoken Japanese to the borrowed Chinese characters. The other syllabary, called katakana, was modified hiragana that has been restricted since the nineteenth century to representing foreign words. A fourth orthography – the Roman, or English alphabet – is also learned by Japanese students starting in secondary school. In spite of having to learn four orthographies, the Japanese nation is one of the most literate nations in the world. This is possible because of a high regard for education, a nationalized educational system, a restriction on Chinese characters to the essential 881 taught in elementary school and the \sim 1,900 general use characters taught in secondary school, and a sequenced, mastery learning approach to writing instruction (Foorman, 1986).

Alphabetic orthographies vary in the transparency of their sound–symbol relations. Italian, Spanish, Hungarian, Serbo-Croatian, Finnish are all highly transparent because of the one-to-one relation between sound and symbol. English is more opaque, in contrast, because vowel sounds tend to have multiple spellings and vary in their pronunciations in different lexical environments. For example, "long *a*" is represented by *aCe* (e.g., *make*) but also by *ea* (e.g., *great*), *eigh* (e.g., *weigh*), and *ei* (e.g., *vein*). *R*-controlled and *l*-controlled vowels have unique pronunciations (e.g., *part* and *call*), as do diphthongs (e.g., *oil* and *boy*). Sometimes vowels reduce to a common "uh" sound called schwa, as in the initial vowel in *above* and the second *e* in *celebrate*. Pronunciations of vowels are also affected by syllable boundaries. Compare the initial vowel in "moment" or "super" with the initial vowel in "supper."In the former case, the initial vowel ends the syllable and is referred to as an "open syllable." In the latter case (i.e., "supper"), the first syllable ends with a consonant and is called a "closed syllable." The vowel sounds in open syllables tend to be "long," whereas the vowel sounds in closed syllables tend to be "short."

The vowel system in English is a source of decoding errors (e.g., Foorman & Ciancio, 2005; Juel & Minden-Cupp, 2000), as well as encoding, or spelling errors (Foorman & Ciancio, 2005; Treiman, 1993). Some words are easier to decode than encode. For example, the printed word *sheer* has only one pronunciation. The spoken word "sheer," in contrast, could be spelled with *ch* representing the initial phoneme (as in *chef*), and with *ear* (as in *hear*), *ere* (as in *here*), or *ier* (as in *pier*) representing the rime (i.e., the medial vowel and remaining consonants). Thus, spelling predicts reading better than reading itself because accurate spelling requires complete mastery of all of the

orthographic patterns of English (Foorman & Ciancio, 2005). This fact has not gone unnoticed in the history of reading instruction, and, in fact, the earliest reading method in the United States was called the ABC method and consisted of having students spell words out loud and pronouncing them. The ABC method was used to teach reading for about 200 years, from the 1700s to the 1900s, and was used in such programs as the *New England Primer, Webster's Spelling Books*, and *McGuffey's Readers*.

Phonics Instruction

Current reading instruction tends to give short-shrift to spelling and, hence, many students do not master the depth of English orthography unless they receive direct spelling instruction. Most beginning reading programs – called basal reading programs – teach from the traditional perspective of grapheme-to-phoneme correspondence rules (i.e., phonics instruction). Accordingly, their phonic lessons consist of instruction in: initial and final sounds of consonants, short and long vowel sounds, consonant blends (e.g., *cr-*, *srp-*, *-nd*), consonant digraphs (e.g., *ch*, *th*, *ng*), silent consonants (e.g., *wr*, *kn*, *-mb*), and, occasionally, syllabication. Rather than introduce the inconsistencies of English vowel spellings in a systematic way, basal reading programs often ignore or confuse the issue. For example, Moats (2000) noted the following keywords for the "short o" sound in one basal reading program: *orange*, *of*, *on*, *once*, *open*, *off*, *out*. Moats opined that "if children are shown that words starting with the letter o begin with as many as six different sounds, as well as the /w/ in *once*, they may surmise that letters are irrelevant to sound and must be learned by some magical memory process" (p. 150).

Another basal reading program handled such allophonic variations of vowel phonemes with a better pedagogical approach. One edition of the program used the keywords *Bob the Frog* to represent /o/. Words containing the same vowel sound as in the -ob pattern (e.g., mob, stop, nod) and -og pattern (dog, clog, cost) were presented. Then the two patterns were contrasted, creating a "set for diversity" (Gibson & Levin, 1975). In the subsequent edition, however, the single keyword *fox* was used for /o/, and the -ob, -og, and -ost patterns were contrasted with -ox within the lesson. This move was justified because the /o/ in *fox* is the common Midwest pronunciation for "short o." The -og pattern is typically taught as part of the -aw phonic element represented in such words as *saw*, *pause*, *call*, *water*, *caught*, and *thought*. In New England, *fox* and *frog* have the same vowel phoneme, as does *card*. It makes sense to have basal reading programs represent sound-spelling patterns according to what has become Standard American English – the Midwestern pronunciation. Likewise, it makes sense to instruct teachers in how regional variations in speech may influence the pronunciation of the sound-spelling patterns targeted in lessons.

Another example of the diversity in conventional phonics instruction is how basal reading programs teach the *oo* spelling pattern. In a description of the lexical, semantic, and syntactic features of six basal reading programs (Foorman, Francis, Davidson, Harm, & Griffin, 2004), Program A does not teach any sound-spelling strategy for *oo*. Programs C1, C2, and E, however, have separate lessons in the second half of Grade

1 for too as in *soon* versus *oo* in *book*. Program D explicitly teaches oo as in *moon*, pointing out to the teacher that this is not the same sound as in *look*, and then avoids using words that contain the -ook rime. Program B creates a set for diversity for oo as in too and in look. In addition, within the same lesson, program B introduces alternative spelling patterns for the vowel phoneme in too – clue, chew, and soup. Again, within the same lesson in B, mini-lessons off to the side of the teacher edition alert the teacher to the fact that the ou in soup has a different pronunciation than the ou in *house* and that the *ou* in *house* is similar to the *ou* in *round*. Then a "long o" sound for ow is established with the example of throw. The mini-lesson concludes with the teacher writing the following words on the board and having the children use the words in oral sentences: now, frown; round, out; snow, grow; soup, you. By extending the lesson beyond the *oo* sound-spelling pattern to include alternate pronunciations of ou and ow, Program B becomes pedagogically unwieldy, as observations of primary-grade classroom and examination of students' achievement data indicated (Foorman, Chen, et al., 2003; Foorman, Schatschneider, et al., 2006). Programs C1, C2, and E are wise to separate the two sound-spelling variations for the *oo* spelling pattern into two separate lessons, one for the pattern as in *book* and the other for the pattern as in *soon*. The sound of the *oo* pattern as in *book* has two other major spelling patterns: u as in *put* and *ou* as in *could*. The sound of the *oo* pattern as in *soon*, however, has many more patterns: uCe as in tube, ue as in glue, ew as in chew, u as in *ruby*, and *ui* as in *suit*. The latter two patterns are too rare to target in a lesson. It is sufficient to target the other three patterns for oo in one lesson and leave ou as in soup (which is consistent with the soon pattern) to another lesson or to a spelling program where the contrast with the ou in house can be made and ow as "long o" can be introduced.

In summary, the scope and sequence of phoneme–grapheme correspondence rules (i.e., phonics) does make a difference to the ease of learning. Learning is optimized when sound-spelling patterns are introduced in order of difficulty with adequate practice on a pattern before a set for diversity with contrasting patterns is introduced. The opportunity to read text containing the sound-spelling patterns taught with corrective feedback provided by the teacher is highly important as well (Foorman, Francis, Fletcher, Schatschneider, & Mehta, 1998; Juel & Roper-Schneider, 1985).

The "Great Debate" of Code versus Meaning

In reading instruction the "Great Debate" concerns the argument about whether to emphasize the alphabetic code (i.e., teach phonic rules) or to emphasize meaning (i.e., use a whole word approach) when teaching children to read (Adams, 1990; Chall, 1967). Basal reading programs typically teach about 90 phonic rules, but the number of sound-spelling rules needed to program a computer to read is estimated to be over 500 (Gough, Juel, & Griffith, 1992). These 90 rules, therefore, are only "skimming the surface" of the complexity of the English alphabetic system and have been criticized by some as having low utility. For example, Clymer (1963) concluded that only 18 of the 45 most common phonic generalizations met his criteria of usefulness defined as producing correct pronunciations at least 75% of the time.

The low utility of many phonic rules has encouraged reading methods that focus on the whole word rather than on sublexical parts of words such as grapheme-phoneme relations. Boosted by Chomsky and Halle's (1968) description of English orthography as morpho-phonological (e.g., the word "vine" is evident in the spelling of vineyard even though the pronunciation has changed), Ken Goodman and Frank Smith resurrected and transformed the "whole word" method into the "whole language" approach whereby learning to read was as natural as learning to speak and decoding was merely a "psycholinguistic guessing game" of using tacit knowledge of syntax and semantics to figure out the meaning of unknown words (Goodman, 1970; Goodman & Goodman, 1979; Smith, 1973; Smith & Goodman, 1971). The "guessing game" metaphor became instantiated during the 1980s in the three cueing systems for reading - syntactic, semantic, and graphophonic. The syntactic and semantic systems were privileged sources of information for word meanings in connected text. Teachers were taught to code oral reading errors using a system called "miscue analysis" (Goodman & Burke, 1973) in which graphophonic errors that preserved word meaning were counted as correct, such as reading house as "home." This practice continues to this day under Marie Clay's (1993) running records coding system. The danger in not providing struggling readers with immediate, corrective feedback is that they are likely to persist in a guessing strategy and not develop the complete orthographic representation of a word needed to become fluent in word recognition (Rayner et al., 2001). Context cues, in fact, are used more by children who are skilled readers than by children who struggle to read (Perfetti, 1985; Stanovich, 1980).

The superficial linguistic trappings of whole language are easily refuted. Learning to read is in fact an "unnatural act" (Gough & Hillinger, 1980). It requires mastering the conventional, intentional, and unnatural relations among sound segments in speech (phonemes) and the corresponding letters of the alphabet. By mastering this alphabetic principle, beginning readers have a productive system that allows them to read the vast majority of English words, leaving only a small percentage of highly exceptional words - approximately 14% (Hanna, Hanna, Hodges, & Rudorf, 1966) - to memorize. By minimizing word recognition difficulties, readers can allocate memory and attention to the main purpose of reading – comprehending what is read. A method that avoids sublexical analysis favors children who come from literate households and have strong oral language skills, including phonemic awareness, and curiosity about letters and sounds. Such children confirm Share's (1995) self-teaching hypothesis whereby phonemic awareness ability bootstraps letter-sound knowledge, which, in turn, bootstraps phonological recoding of unknown words. With corrective feedback from a parent or teacher, such children become more sensitive to the letter co-occurrence patterns of English so that units larger than grapheme-correspondence units can be computed in memory. Thus, stretch may be recognized as str-etch rather than as *s*-*t*-*r*-*e*-*tch* and requesting as *re*-*quest*-*ing* rather than as *r*-*e*-*qu*-*e*-*s*-*t*-*i*-*ng*. Additionally, recognition of orthographic rimes and morphological units such as prefixes, suffixes, and inflectional endings make it possible to read by analogy to known words (Goswami, 1998; Ziegler & Goswami, 2005).

Children who are able to compute connections among orthography, phonology, and morphology on a word by word basis with minimal directive feedback from adults – the

poster children of the whole language movement – are declining in numbers in an age of increased TV viewing and lack of engagement with print in the home (Adams, 1990). When the low print environment of the home is coupled with lack of opportunity to learn in school due to poor instruction and insufficient material resources, a growing literacy crisis emerges (National Research Council, NRC, 1998).

Research on Reading Instruction

The current debate in beginning reading instruction is not whether phonics should be taught but rather how it should be taught so that students read fluently with comprehension. Specifically, the debate revolves around (a) how phonics relates to other critical elements in teaching reading, (b) how explicit phonics instruction needs to be, and (c) how to organize reading instruction into a layered approach so that additional learning opportunities are provided for those having reading difficulties (Foorman & Connor, in press).

Critical Elements in Learning to Read

A consensus has emerged regarding the components of effective reading instruction (Foorman & Torgesen, 2001; National Institute of Child Health and Human Development, NICHD, 2000; NRC, 1998). These components are: phonemic awareness and phonemic decoding skills, fluency in word recognition and text processing, construction of meaning, vocabulary, spelling, and writing. Importantly, these components are the same whether one is discussing classroom reading instruction or instruction for children at risk of reading problems. The difference is that for children at risk for reading disabilities, instruction in these critical elements needs to be more explicit and more intense (Foorman & Torgesen, 2001). Another noteworthy point is that with the recent emphasis on reading initiatives in the United States, instruction in the language arts - spelling, writing, and oral language - has been neglected with potentially negative consequences for literacy acquisition (Mehta, Foorman, Branum-Martin, & Taylor, 2005). In a recent reanalysis of the meta-analysis on phonics studies by the National Reading Panel (Stuebing, Barth, Cirino, Fletcher, & Francis, 2008), the advantages of a comprehensive reading/ language arts approach that includes a balance of systematic phonics instruction integrated with reading for meaning and writing is shown.

Most of the research on reading instruction has been done on phonemic awareness and decoding and the fruits of this research have been realized in effective reading interventions (NRC, 1998; NICHD, 2000; Rayner et al., 2001). The research on fluency and comprehension, however, is not easily translated to instruction. Fluency is often measured as the number of words read correctly per minute in connected text. The substantial correlations between this measure of speeded word reading and scores on reading comprehension tests in the elementary grades have been used as evidence that fluency causes comprehension and students need to meet higher and higher benchmarks of words read correctly per minute over the grades. However, it is also possible that comprehension causes fluency; that it is the understanding of what was read that facilitates word recognition and reading with expression. Thus, a common instructional strategy for enhancing fluency – repeated readings – may have little transfer to fluent reading of new texts because of weak decoding strategies or failure to grasp the meaning of the words (i.e., poor vocabulary). Decoding strategies can be taught, but instruction that will reduce the size of the vocabulary gap between socioeconomically advantaged and disadvantaged students becomes increasingly difficult beyond the preschool years (Hart & Risley, 1995).

Reading comprehension is a matter of understanding written language and, therefore, places both cognitive and linguistic demands on the reader. According to the simple view of reading (Gough & Tunmer, 1986), reading comprehension equals listening comprehension plus decoding. This view is generally supported in that reading comprehension becomes as good as listening comprehension as decoding is mastered (Rayner et al., 2001). Research from cognitive psychology has shown the kind of inferences and mental models that skilled readers make when reading text and the kind of comprehension monitoring necessary to ensure consistency in meaning as text is read. Individual differences in working memory place constraints on these cognitive processes in children as well as adults. Working memory constraints are also apparent in syntactic processing of complex structures such as embedded phrases, anaphora, and cohesive ties. In addition to syntactic demands, the semantic demands imposed by the vocabulary used in a text can impede reading comprehension. If a reader has difficulty grasping the meaning of words in sentences then he or she will struggle with the meaning of sentences, paragraphs, and the text as a whole.

For instruction to focus on reading comprehension, the teacher needs evidence that students can (a) decode the words in the text and understand their meanings, (b) have relevant content on which to base inferences and text representations, and (c) have sufficient working memory to activate (a) and (b) while monitoring what is read. Prior to reading the text, teachers often explain challenging vocabulary and activate prior knowledge via discussion, field trips, or multimedia presentations. Although rarely done, teachers could reduce syntactic processing demands by having students highlight pronouns and their referents, explain cohesive ties, and discuss the meaning of sentences with complex embedded clauses. Story maps or graphic representations of the characters and plot of narrative text and outlines of the organizational structure of informational text can help students write summaries of what they have read and pose and answer questions about the passage.

Prescriptive Versus Responsive Approaches to Reading Instruction

Phonics instruction that is direct and systematic usually has a prescribed scope and sequence of grapheme–phoneme correspondence rules and "decodable text" that provides opportunity to practice the phonic rules taught. High frequency words with sound-spelling inconsistencies – words from the Dolch List (Dolch, 1953) – are gradually introduced so that interesting stories can be constructed but memory demands are minimized. In contrast, responsive approaches embed phonics instruction within tradebooks that are "leveled" according to estimates of word frequency and difficulty of syntactic patterns. Teachers respond to students' reading errors with mini-lessons on sound-spelling patterns,

often having students construct words using magnetic letters or write sentences containing the words. The same tradebook is often re-read to build students' oral reading fluency. Because of the lack of script, responsive teachers need deep understanding of English orthography and a good record of individual student's knowledge of sound-spelling patterns so that appropriate feedback and practice are provided. When the alphabetic principle is made explicit and opportunities for mastery are provided in small-group instructional formats, responsive approaches can be as effective for beginning readers as prescriptive approaches (e.g., Mathes et al., 2005). However, in whole-class formats where teachers have limited knowledge of English orthography and little instructional support, responsive teaching approaches are typically seen to be less effective than prescriptive approaches (see Rayner et al., 2001).

Layered Delivery Systems

No matter how explicit the instruction or how scripted the reading program, the major challenge of beginning reading instruction is how to individualize it. In short, how can one teacher with 20–28 children in a class respond to individual children's reading errors. The age-old solution is for the teacher to listen to a group of children read while the rest of the children work individually at their desks or in centers. For the past 20 years the vast majority of basal reading programs have avoided the reading group format because of perceived deleterious effects of ability grouping. Recently, the emphasis on school-level accountability has made educators rethink ability groupings as flexible in their membership and based on progress monitoring data. No longer is it the expectation that the "bluebirds" and "buzzards" will remain intact reading groups throughout first grade. Rather, teachers are expected to use early reading assessment data to inform instructional groups and to reconstitute group membership as students' skills change.

Grouping students for reading instruction allows the teacher to listen to and provide feedback on each student's oral reading and to take into account individual skills when doing so. However, the only way that small-group, or even one-on-one instruction, will ensure grade-level proficiency in reading is if additional instructional time is allocated before, during, or after school. School reform models, such as Success for All (Slavin, Madden, Dolan, & Wasik, 1996), include an extended reading/language arts period of 90 min or more, tutoring, and a facilitator. The Reading First Initiative in NCLB has done the same. A major challenge for schools is (a) how to staff and schedule these multiple layers of reading instruction, and (b) how to articulate reading instruction in the pull-out intervention with what is taught in the classroom.

Conclusion

Reading has been a fertile, interdisciplinary area of research for the past several decades in the United States and, more recently so, internationally. Consensus documents summarizing research in the United States have helped quell the "Great Debate" over phonics versus meaning-emphasis approaches to reading in alphabetic orthographies and have established a balanced view of reading instruction whereby explicit instruction in the alphabetic principle is integrated with reading for meaning and writing. Instructional issues in beginning reading revolve around: (a) the degree of explicitness in phonemic awareness and decoding instruction for a diverse classroom of students; (b) how to define the goal and means for fluency instruction; (c) how to prepare students for the linguistic and cognitive demands of text; and (d) how to deliver multiple layers of reading instruction in school settings so that all children have the opportunity to learn to read. Recent policy in the United States holds schools accountable for solving these instructional issues and evaluations of federal initiatives are currently underway. In the attempt to make standards-based educational reform work within schools let us not neglect attention to eliminating inequalities outside school, in society, that threaten to diminish efforts to close the achievement gap.

Biographical Notes

Barbara Foorman, PhD, is the Francis Eppes Professor of Education and Director of the Florida Center for Reading Research at Florida State University. Previously, Dr. Foorman was Professor of Educational Psychology at the University of Houston and Professor of Pediatrics and Director of the Center for Academic and Reading Skills at the University of Texas Health Science Center at Houston. During 2005, Dr. Foorman served as the Commissioner of Education Research in the Institute of Education Sciences in the US Department of Education. Dr. Foorman has over 100 publications about reading and language development. She co-edits a journal, serves on national advisory and consensus committees on reading, and has been principal investigator of several federally-funded grants concerning early reading assessment and interventions and literacy development in Spanish-speaking children. Her centers have provided professional development and technical assistance to school districts in Texas and Florida. She has provided outreach to the schools and the public by chairing Houston ISD's Committee on a Balanced Approach to Reading and working to develop and validate the Texas Primary Reading Inventory used in 96% of the school districts in Texas and in several other states.

Kristi L. Santi, PhD, earned her doctorate in Special Education at The Florida State University in 2002. She is the president of The Santi Group, LLC which provides consulting and training to schools, districts, and educational based business. As a researcher, Dr. Santi is the co-investigator of an IERI grant which is investigating the impact of mentoring/coaching on student outcomes as well as technology and assessment on student outcomes. Dr. Santi is a former special education teacher with teaching experience in grades K-12. She has taught in general education settings, total inclusion classroom settings, and resource classrooms. She is the co-author of early reading benchmark (TPRI) and progress monitoring assessments (PMER and MPLE).

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TEACHING HISTORY

Joseph Zajda and John A. Whitehouse

Teaching History and Learning National Identity

Recently, in a number of countries, teaching and learning history, as a curriculum discipline, has been characterised by political, economic, cultural and ideological imperatives, whose teleological goal is one of the nation-building process and one of cultivating a modern dimension of national identity in the global culture (Baques, 2006; Janmaat & Vickers, 2007; Macintyre & Clark, 2003; Nicholls, 2006; Simpson & Halse, 2006; Taylor, 2006; Zajda, 2007). In the United States, history continues to be a 'staple of the American curriculum in both elementary and secondary schooling' (Thornton, 2006, p. 15). Similarly, in the Russian Federation, history lessons in schools play a significant role in the nation-building process, citizenship education, patriotism, and values education, which is closely monitored by the state (Zajda, 2007, p. 291).

In Italy, political debates surrounding the content of school history teaching, during the 1980s and the 1990s had noticeably affected the task of Italian history teachers. In 1995, the government created a commission to evaluate history textbooks, as many, it was believed, tended to 'falsify or ignore certain pages of Italian history', thus hindering 'the reconstruction of a national identity common to all Italians' (Cajani, 2006, p. 37). The polemic surrounding history teaching in schools continues in many countries. For instance, ideologically-driven goals are found in history classrooms in Japan, where student learn 'official' stories of the past, or politically-correct historical narratives, and are encouraged to internalise 'common identity and values' (Ogawa & Field, 2006, p. 56). Learning history helps to develop one's 'sense of place' in the global, national and local community. It also contributes to students' learning a 'more complete understanding of the present' and a 'compression of past and present moral and ethical issues' (Taylor, 2006, p. 44; Zajda, 2002).

Teaching History and Historical Thinking Globally

Aristotle claimed that the difference between history and poetry was that history is the story of what actually happened rather than what we wished would have happened,

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i.e. the real of poetry (Southgate, 1996, p. 14). In making this distinction, according to Parker (2004), 'Aristotle cast light on the power that history has to define the realm of the real'. Parker observes that there are those who have the power to control the official historical narrative, in support of a dominant ideology of the state. This is likely to make content selection process an 'extremely contentious one':

Not only does it marginalise as 'not real' as those events that do not make it into the historical canon, but it leads us to believe that what is presented to us is necessarily 'real'. Those who control the content of school history, therefore, control the official version of reality, which they may use to support particular political or ideological goals. (Parker, 2004, p. 48)

Pedagogical Models in Teaching History

Pedagogical models in teaching history in school, represented on a curriculum continuum, range between the traditional and transformational. Some scholars argue that history teachers usually choose between at least two classroom pedagogies: the fact-based approach or that of historical understanding (Jones, 2006; Parker, 2004; Seixas & Wineburg, 2000; Taylor, 2006). The fact-based approach typifies a more traditional approach to teaching history, where students need to master the facts of history. As Parker, explains, the fact-based approach is more conservative, as it the focus is on a mastery learning of the facts:

The fact-based approach is more conservative in the respect that facts can be limited or interpreted in limited ways by prescriptive force. In this model, school history is presented as a finished product whose contents are authoritatively defined by school textbooks...the textbook view of history seem to the student to be most trustworthy and closest to the 'truth'. (Parker, 2004, p. 49)

Another version of traditional approach to teaching history is one of the 'handover-your-heart', based on ubiquitous nationalism and patriotism. In this pedagogical paradigm, history is largely a self-congratulatory narrative, 'where collective memories are upheld, where a nation tells its best stories about itself, where history sets out to enhance social cohesion by upholding a single proud view' (Jones, 2006).

The second approach to teaching history is one of cultivating historical understanding and thinking. Here the focus is on critical thinking, applied to illuminate the process of historical understanding, rather than on any prescribed content to think about. The assumption here is, as Parker notes, that history represents an ongoing investigation into 'multiple historical truth' (Romanowski, 1996), rather than a study of a finished narrative ready for uncritical and 'unquestioned consumption' (Parker, 2004, p. 49). With the emphasis on critical and historical thinking, students are encouraged to analyse in formation and make independent and critical evaluations, rather reproducing text-book controlled answers. Postman and Weingartner (1971), who were very critical of such traditional teaching methods in history, discussed an example of a typical text on Ancient Egypt in schools and the questions that students had to answer: The most depressing aspect of this piece of pretentious trivia is that to most people nothing seems wrong with. Indeed, it may even be thought of as reflecting a 'progressive' idea or two. (After all, aren't the students asked to work in small groups and do 'projects'? Clearly, defenders of 'high standards' would have no cause for complaint here. (Postman & Weingartner, 1971, p. 56)

Both Jones (2006) and Taylor (2006) argue that while genuine historical thinking and understandings are complex and sophisticated, they can be taught in the class-room. Jones (2006) believes that in historical education in Australia, compared to that of the United States, students learn fewer facts about their national histories, but more about the rest of the world:

Australian history, if only in the last four decades, also seems more constructed and contested; questions of class, migration, gender and reconciliation re-shaped erstwhile British senses of ourselves... The other model of history teaching, our model, seems to make history edgy, unsettling, controversial. (Jones, 2006, p. 6)

The historical thinking approach, with critical thinking and inquiry-based pedagogy, includes multiple perspectives in history, or a diversity of discourses in historical narratives (Zajda, 2004b). Bruner's concept of spiral curriculum is most applicable in teaching multiple perspectives in history lessons, not only to teach different interpretations of the historical events, but also to view historical narratives as cross-disciplinary. It draws on cross-cultural understandings that are indispensable to both critical literacy and transformative pedagogy. Whitehouse (2005) argues that contemporary developments in Australian curriculum stress the importance of critical thinking:

In the humanities, and history in particular, the analysis of source material represents a very productive area for critical thinking to take place. Rather than reading texts in unproblematic ways, critical engagement with source material can position students to experience subject disciplines directly. The questions that students formulate are central to this process. By asking questions about texts students adopt the role of the historian, political scientist or philosopher. (Whitehouse, 2005, p. 83)

Critical historical thinking is one of the goals of progressive history teaching and transformative pedagogy in general. It is also potentially 'subversive pedagogy':

An autonomous and critical history has always been a subject likely to challenge accepted views and to indicate alternative possibilities; it has thereby always been potentially subversive. (Southgate, 1996, p. 57)

The place of historical evidence in the classroom defines different approaches to teaching history. Attempts to theorise the place of source material in classrooms have been linked to developments in learning theory. According to Jean Piaget, students only become capable of abstract thought at the formal operational stage of cognitive development. Applying Piaget to history, Roy Hallam (1972) asserts that most students do not move beyond concrete operations until the age of 16½. This would render pointless the inclusion of evidence in curriculum for younger students. This contrasts with the position of Jerome Bruner (1960) who holds that any discipline can be taught if its defining structures are made explicit. In the 1980s, Bruner also developed the rhetorical pedagogy by and in which we teach: the story, the puzzle, the debate (Bruner, 1986, 1991). He developed his ten modes of narrative discourses, applicable to history teaching and other disciplines. They ranged from *narrative diachronicity* to *narrative accrual*. Building on this Brunerian pedagogical principle, Martin Booth (1987) rejects the way in which Hallam draws on Piaget. He argues that Hallam fails to characterise historical reasoning accurately. Indeed, Hilary Cooper (1994) demonstrates that primary school children are capable of abstract historical thought if the appropriate instructional scaffolding is put in place.

The taxonomy of educational objectives developed by Bloom (1956) has influenced the treatment of sources in the classroom. The cognitive domain of the taxonomy classifies questions according to their degree of complexity. Although this fosters higher order thinking, the taxonomy lacks disciplinary specificity. Applying Bloom to history, Coltham and Fines (1970) constructed a hierarchy of questions for use with primary sources. This moves evidence-based inquiry to the centre of history teaching. This was a significant accomplishment, but the same research has been used to defend primary source immersion programs that fail to engage adequately with secondary sources (Fines, 1989). For Chris Husbands (1996), the value of primary evidence rests in the thinking that it stimulates; but secondary sources foster these intellectual processes by creating a framework for inquiry.

Brunerian thought underpinned the constructivist Schools Council History Project (later the Schools History Project or SHP) in the United Kingdom. The SHP aimed to make the disciplinary features of history explicit to students so that, through engaging with the aims, methods and subject matter of history, students would develop their capacity to engage in historical thought. The SHP emphasises the importance of evidence as the foundation of historical learning. Influenced by the research of Coltham and Fines, the SHP marks the advent of the 'New History'. Adopting the Vygotskian view that learning is social and is constructed through language, or social constructivism, the SHP encouraged discussion, engaged the interests of adolescents and addressed their local contexts. Denis Shemilt completed an important evaluation of the SHP (1980). Confirming the research of Booth, Shemilt offers a detailed exploration of history curriculum. He affirms the importance of providing opportunities for students to engage in complex historical thought. Teaching history as a discipline that seeks explanation on the basis of evidence changes how the subject is conceptualised by children. Inquiry, rather than recall, drives the subject. It embraces problem-solving and challenging levels of thought.

The lasting achievement of the cognitive-psychological tradition of history education research is the demonstration that children are capable of constructing complex, abstract understandings of the past. Having established the capacity of students, theorists have turned to ways in which this potential for learning might be realised. In Britain, the role of empathy in the history classroom became the focus of much research and debate. Ashby and Lee (1987) argue that adolescents need to use imagination to comprehend historical agency. It follows that the history curriculum must offer opportunities for empathic engagement with the past. Project CHATA (Concepts of History and Teaching Approaches) has given rise to developmental models for causal explanation by children. This research favours progression over aggregation and advises teachers to formulate learning objectives in disciplinary terms.

Learners, teachers and subject matter constitute the three core components of the educative process. British research has defined the learning potential of students and charted developmental pathways, but content standards have dominated debate in the United States. A robust tradition of American research has developed concerning the knowledge base of teachers. In terms of the subject-matter component of that knowledge, Sam Wineberg and Suzanne Wilson (1988) explore the relationship between disciplinary expertise and learning outcomes. For example, teachers need to understand the nature of evidence if students are to abandon naïve readings of sources as transparent windows on the past, in favour of a more critical mindset (Wineburg, 2001). Disciplinary knowledge alone is not sufficient for teachers. The ability to represent the discipline to students for the purpose of teaching is pivotal. Underpinning this position is the research of Lee Shulman (1986). Disciplinary structures determine the validity of knowledge claims; curricula must embrace this insight to facilitate learning through inquiry.

Teaching History: Theory into Practice

History is a discipline with its own purpose, content and modes of inquiry (Taylor, 2006; Taylor & Young, 2003). Bruner (1960, 1979, 1986, 1991) holds that the structures of a discipline must be made explicit to enable students to learn. How does the discipline produce knowledge? What are the issues at work in this process? In the case of history, the teacher must present the discipline as an exploration of the past based on evidence. This means that students use primary and secondary sources to form understandings of times other than their own. Historiography in the classroom consists of students engaging with secondary sources:

The implications of historiography for the classroom are profound. Historiography is an implicit part of historical understanding, not some peripheral aspect of the discipline. Leading students to this understanding creates rich possibilities for historical understanding. As a first step, teachers must examine key historical works on the topics that they plan to teach. The questions that historians pose about the past have the potential to drive the curriculum. (Whitehouse, 2008, p. 6)

Pedagogical Reasoning and Action in History

Research associated with the New History movement demonstrates that adolescents can make meaning from such material, if the appropriate instructional scaffolding is in place. The challenge for the teacher is to establish such a framework. The model of pedagogical reasoning and action developed by Lee Shulman (1987) offers a productive way forward. This model supports the implementation of new directions in the subject (Whitehouse, 2008), but also provides a strong foundation for beginning teachers.

The initial stage of the Shulman model is *comprehension*. Disciplinary knowledge is fundamental to this stage. This involves more than a basic understanding of facts and dates. The teacher must grasp the processes of inquiry that defines the discipline. Students enter the history classroom with the belief that history is a stable and unproblematic body of information (Shemilt, 1980). It is the task of the teacher to challenge this belief. This means that the teacher needs to understand the importance of evidence and interpretation to the discipline. The past is not available in unmediated form. Instead, historians construct interpretations of the past based on primary sources. A command of the discipline is only part of knowledge that the history teacher brings to the classroom. It is also crucial to have a strong understanding of educational purposes. What are the objectives of the lesson? How does the lesson form part of a coherent sequence of instruction?

The second stage of the model – *transformation* – unites discipline and pedagogy. The ability to connect these forms of knowledge is the province of the teacher. Shulman (1986) argues that pedagogical content knowledge is the key form of understanding possessed by teachers. It concerns the ways in which teachers render subjects learnable to students. Pedagogical content knowledge is pivotal at this stage of the model. The transformation stage is divided into four steps: preparation; representation; selection and adaptation. First, teachers prepare material for use in class. In history, this involves more than the selection of pages from a textbook. Primary and secondary sources enable students to learn about the past. The teacher needs to select sources that will capture the imagination of students and foster learning about the past. Visual sources are often a useful way to engage students.

The next step in the transformation stage is representation. The teacher identifies the concepts in the subject and considers ways in which students will encounter these ideas in the classroom. For example, a key aspect of the study of the past is historiography (Taylor, 2005). When teaching a major historical event such as the Russian Revolution, the teacher selects a range of accounts by different historians. Marxist historians present the event in terms of class struggle and impersonal socio-economic forces. Other historians emphasise the influence of individuals such as Lenin or the impact of events such as the Great War. Such perspectives may recast the revolution as a coup. Major historical events invite many different interpretations. It is the role of the teacher to present divergent historical perspectives in the classroom. This enables exploration of content knowledge and the processes of inquiry that define the discipline. It sets students on a path to participation in debates that have divided historians as they struggle to understand the past. Historiography is one of many concepts in history. Time, causation, continuity and change, bias, narrative and historical explanation all shape the history classroom (Lee, Dickinson & Ashby, 2001).

The third part of the transformation stage is selection. The teacher chooses learning activities to implement in class. Discussion is invaluable to history. A range of innovative
learning activities are designed to foster discussion. For example, each student might undertake individual research on a different Greek vase. Working in small groups, students share their findings using the Round Robin discussion technique. The activity requires each student to speak in turn. It is a useful mechanism for students to provide successive feedback in a small group setting. Team Jigsaw is another such technique. The class is divided into small groups of equal size. Each team is allocated a different primary source. Working together, each group analyses its source. Students are then reallocated to new groups. Each new group includes one member of the previous groups. Students then provide feedback on the sources that they were allocated. These groups might then complete an activity on bias that involves comparison of all the sources.

The last step in the transformation stage is adaptation. Here, the history teacher adapts material to meet the needs of the class. The language used in sources may pose difficulties for students. The teacher must consider the length of extracts. Such decisions demand a detailed understanding of the learning needs of individual students. It is crucial to take account of the interests of students and their background, as well as their ability level and the prior learning that that they bring to the classroom. The challenge for the history teacher is to adapt material without distorting its nature. By providing appropriate materials, the teacher provides a means for students to engage in the study of the past. Having concluded the transformation stage, we return to the main model.

Instruction is the third stage of the model of pedagogical reasoning and action. Teachers often explore history through narrative. This is a powerful way to represent the past, but students need to understand its biased nature. Constructing a narrative privileges one perspective over another. This is an inescapable. Exploring different narratives leads students to a deeper understanding of the provisional and partial nature of historical knowledge. Indeed, the history classroom provides an engaging environment for the exploration of ideas. The past is both similar and different to the present. Instruction can capture this through thematic analysis. How do gender roles differ between ancient China and modern Australia? What are the causes of war? What is the nature of democracy? Responding to questions such as these demands disciplined inquiry (Levstik & Barton, 2005). By engaging with source material, students can participate in the debates that drive historians. Rather than presenting the past as stable and unproblematic, the history teacher fosters an intellectual climate of argument and inquiry.

The concluding stages of the Shulman model are *evaluation*, *reflection* and *new comprehension*. In terms of evaluation, the teacher assesses the learning that has occurred. In history, assessment frequently takes the form of essays, document studies, exercises on historiography and research projects. There is, however, a vast range of ways in which students are able to present their work. The principles of open-endedness and choice are good starting points for the design of assessment tasks. Furthermore, assessment may serve functions other than measuring outcomes. Formative assessment should be part of the learning process. There are many ways in which the teacher can provide on-going feedback as editor, research supervisor and mentor. Students can reflect on their own work and that of their peers. Reflection

should not be confined to students. History teachers must reflect on their practice. Did the lesson lead students to a deeper understanding of the past? How might it be improved? Such reflection gives rise to new understandings about the teaching of history (Lee, Dickinson & Ashby, 2001).

In teaching history and historical thinking in particular, we can draw on the following four points:

- 1. Historians interpret the past in different ways. The purposes of historians differ. They pose diverse questions and make sense of sources differently. Debates between historians help to create historical knowledge.
- 2. The writings of historians are bound together by intertextual continuities. One interpretation of the past may presuppose understanding of another. Historians often position themselves in schools. Even disagreements about the past generate intertextual relationships.
- 3. Context shapes the work of the historian. It shapes purpose, method and product
- 4. Exploration of history writing (historiography) reveals the processes of inquiry at work in the discipline. Historians explore the past on the basis of evidence. They engage in debates about the past.

Teaching History and Intercultural and Global Understanding

History as a school subject is both local and universal. It defines not only specific nations, their particular cultural settings, and their own historical narratives coloured by dominant ideologies and preferred representations of the past. It also represents some universally shared values concerning the national identity and the nation-state, or the 'desire to establish and perpetuate a cultural identity rooted in common past that serves specific purposes in the present' (Parker, 2004, p. 50). History, as a subject has another unique quality. It has both instrumental and symbolic value. Both its contents and the way in which it is produced and taught demonstrate dominant ideologies, and political, economic and cultural imperatives brought on by forces of globalisation.

The Role of Teaching History in Intercultural Dialogue and 'Learning to Be'

Historical, comparative and international discourses surrounding other cultures, can often lead us to identify and question beliefs and assumptions that are taken for granted, by making the familiar strange and the strange familiar, and questioning the 'universality' of our beliefs and assumptions. Recent global events depicting violence, conflicts, and war, demonstrate the need for a more visible paradigm of intercultural dialogue in history education research. I needs to focus more on emerging significant issues in intercultural and cross-cultural understanding globally, affecting identity politics, liberty and democracy. Informed and balanced intercultural dialogue, via teaching history, can help us to define, explain and critique what is achievable, especially within the current imperatives of globalization and education reforms.

Some scholars, like Maureen Guirdham (2004), and Jerzy Smolicz (2005) believe that authentic and dialogical intercultural communication skills hold the key to resolve global political, social and religious conflicts. Smolicz, for instance, argued that effective intercultural communication. cross-cultural values education and intercultural transformation can influence people's perceptions and their views of the world, and may be reflected in increased metacognitive, reflective and critical thinking domains, affecting their thinking, values and action (Smolicz, 2005). His unique concept map of a human rights tree, based on the UN Declaration of Human Rights, includes such dimensions as multiculturalism, shared values, pluralist democracies, spiritual and religious rights and the rule of law. Similarly, Rosita Albert (2006) observes that in order to address interethnic conflict, intercultural research should focus more on interethnic relations, prejudice reduction, and conflict resolution. Majhanovich (2006), on the other hand, with reference to intercultural dialogue, focuses on the impact of neo-liberal economy and globalisation on education and immigrant/minority students. The imperatives of globalisation impact on most nations around the world. Globalising pedagogies focus, among other things, especially in the United States, Canada, the United Kingdom, France, Germany, Japan, and Australia, on critical literacy, and the knowledge and skills necessary to compete in a global.

One of the unresolved issues, surrounding the nature of debate in historical narratives and intercultural dialogue, is understanding the intercultural implications of 'Learning to Be', one of the pillars of education for the twenty-first century. The Delors Report (1996) stated, that 'Individual development is a dialectical process which starts with knowing oneself and then opens out to relationships with others. In this sense, intercultural pedagogy in history teaching has a potential to become an 'inner journey' with others.' (Delors Report, 1996, p. 95). At the epistemological level, 'Learning to Be', as applied to historical thinking and intercultural dialogue, has cross-cultural implications (Zajda, 2004a, p. 84). It can be argued that, in a dialectical and existentialist sense, 'Learning to Be' is *between, across and beyond* cultures. In the context of such a transdisciplinary action research, 'Learning to Be' offers an authentic and worthwhile trans-cultural dimension, which enables the individuals to develop an authentic and empowering vision on the meaning of life, peace, and tolerance.

One of the pioneers of intercultural dialogue and research was Sarah E. Roberts (1946), who was writing on the issues of intercultural research in the United States. Since then, the body of intercultural research has blossomed into a multicultural, cultural diversity and human rights 'tree', constructed by Smolicz (2005):

As nations strive to harmonise their cultural diversity with a stable and resilient nation-state that adheres to the principles of universal human rights, the use of the 'Tree Model' indicates that some rights are indeed indispensable in a democratic state. These include civic, political and cultural rights, as indicated by the 'trunk' in the 'tree diagram'. The cultural rights, however need not conform to a single pattern, with the 'crown' of the tree assuming different configurations, depending on the cultural traditions of the groups that make the nation and their members' current aspirations. (Smolicz, 2005, p. 207)

Historical Thinking as Cultural Capital

The concepts of cultural and social capital play a significant and critical part in historical thinking. Bourdieu (1986) defined cultural capital in terms of the knowledge and skills advantages necessary for social mobility. Saha (2005) argues that cultural and social capital are 'two important concepts in understanding many economic and social processes in all societies' (Saha, 2005, p. 753). Bourdieu (1986) identified four types of capital, which are particularly relevant to teaching history: economic, cultural, social, and symbolic. In teaching historical understanding and thinking, cultural and social capital enable us to understand the 'forces of globalisation' and 'ideological transformations' affecting nations and individuals (Zajda, 2005, p. 1). In general, globalisation refers to cultural, economic and educational integration, where the world is 'becoming more homogeneous with respect to a wide range of economic and social processes' (Saha, 2005, p. 752). In historical thinking, the notions of power, cultural and social capital, together with an analysis of an unequal distribution of socially valued commodities globally, are necessary for understanding various forces affecting the dynamics of historical evolution of societies.

Conclusion

History as school subject plays a significant part in discourse analysis of different societies and their historical and cultural evolution and transformation over time. By drawing on the Brunerian meaning-making process, history pedagogies, grounded in constructivist, both cognitive and social, and transformational paradigms, have the power to engage the learner in a significant and meaningful learning experience. By means of a realm of semblance, where we imagine what is was like for them, and the 'Other', we can employ hermeneutics. In historical thinking, hermeneutics is the process where teachers prefigure, configure and re-figure, not unlike the Hegelian dialectic of the process of anti-thesis, thesis and synthesis. History teaching, in the form of re-imagined historical narratives, is one of the few examples of authentic, empowering and transformational pedagogies in the global culture.

Biographical Notes

Joseph Zajda, PhD, is Associate Professor in the Faculty of Education at the Australian Catholic University (Melbourne Campus). He specializes in globalisation and education policy reforms, history textbooks, decentralisation and privatisation in education, credentialism, vocational education and training, excellence and quality in education, and comparative and international education (Russia, Poland, and Australia). He edits *World*

Studies in Education, Curriculum and Teaching, and Education and Society for James Nicholas Publishers. His book publications include: Education in the USSR (Pergamon Press, 1990), Education and Society (James Nicholas Publishers, 2005), Society and the Environment (James Nicholas Publishers, 2005), Education and Social Justice (Springer, 2006), Curriculum, Culture and Teaching, Learning and Teaching James Nicholas Publishers, 2005), Decentralisation and Privatisation in Education (Springer, 2006), and Schooling the New Russians (James Nicholas Publishers, 2007). He is editor of the International Handbook of Globalisation. Education and Policy Research (Springer, 2005). He is co-editor (with Davies and Majhanovich) of Comparative and Global Pedagogies: Equity, Access and Democracy in Education (Springer, 2008), and co-editor (with Biraimah and Gaudelli) of Education and Social Inequality in the Global Culture (Springer, 2008). He is also the editor of the 12-volume book series Globalisation, and Comparative Education (Springer, 2008). In April 2004, he received the Vice-Chancellor's Award for Excellence in Teaching, Australian Catholic University. He was chair and co-chair (2003-2008) of the World Council of Comparative Education Societies (WCCES) Publications Standing Committee. He was also on the Board of Directors of the Comparative and International Education Society, USA (2003–2007).

John A. Whitehouse lectures in History/Humanities in the Melbourne Graduate School of Education at the University of Melbourne. An experienced teacher, he is committed to strong partnerships between tertiary education and schools. He is editor-in-chief of the research section of *Agora*, the journal of the History Teachers' Association of Victoria. John also directs the Classics in Schools Project of the Classical Association of Victoria. He holds masters degrees in education and history. His research interests include historical imagination, history education, historiography and co-operative learning. His recent publications include: 'Critical thinking in the humanities. *Educational Practice and Theory*, 2008, *27*(1), 83–93', and 'Teaching the historians. *Agora*, *43*(2), 4–8'.

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TEACHING MATHEMATICS

Michael L. Connell

Becoming a Teacher of Mathematics

Mathematics education has long experienced a large gap between conceptions regarding mathematics held by practicing mathematicians and the school environment where mathematics is taught. These diverse belief systems have lead to the creation of a dichotomy in which there is the world of "school mathematics" of the teacher and that of the "real mathematics" of the mathematician and scientist. This dichotomy causes severe problems for education as practicing teachers are only aware of school mathematics.

As such, they are only able to teach from this perspective. Yet, to be adequately prepared for the demands of the evolving society, there must be a significant change in the view of "School" mathematics to enable an induction into "Real" mathematics as envisioned and practiced by mathematicians and scientists. This is an induction which cannot occur without an active and willing participation of the teachers themselves.

In large measure this gap persists because most teachers learned their content through the same ineffective methods that educational reformers are endeavoring to replace. As a consequence many of them seriously deficient in their understanding of the subject matter they teach (Ball & Bass, 2000). Suffice it to say, teachers who do not understand the content conceptually are unable to teach it conceptually.

For a meaningful positive change to take place in the mathematics instruction of teachers implement a different instructional sequence, evaluation scheme, and curriculum than those traditionally deployed (Stoddart, Connell, Stofflett, & Peck, 1993). Unfortunately, one of the major barriers to implementation is that teachers are often not in a position to implement such changes. Teachers first must be able to reach beyond predominantly procedural views of mathematics to grasp essential conceptual constructs themselves (Ball, 2003).

However, neither the common "two-week" in-service, nor additional coursework separate from actual classroom experience, is sufficient if these shifts in perspective are to be reached. Teacher in-service and support must bring about conceptual understandings on the part of the teachers and include parallel actual classroom implementation via extensive co-teaching and modeling by master teachers throughout the course of their methods preparation. Furthermore, sufficient follow up time must

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be spent so that the new and desired understandings are thoroughly integrated into teachers' normal routines.

Unique Requirements for Teaching Mathematics

Among the content areas mathematics is unique in many ways. In particular, typical mathematics curriculum contains both procedural and conceptual elements each of which might correctly be thought of as mathematics content (Sfard, 1991). However, far too often only the procedural aspects of mathematics are effectively taught and assessed. This tendency to focus upon the procedural aspects of mathematics is so widespread that by the time many students reach the calculus even the better students have forgotten that mathematics is supposed to be sensible.

Coming from such a background it is not surprising that teacher candidates typically enter their professional training deficient in personal meanings for the topics of mathematics. Teacher candidates routinely hold seriously deficient understandings of the mathematics content they would be later required to teach their students. Although a majority of teacher candidates are able to correctly solve simple computational problems many of these have difficulty performing at the procedural level once they get beyond basic rational number concepts. Despite having graduated from high school and successfully completing two prerequisite undergraduate courses in the mathematics department, many candidates lack sufficient mathematical knowledge to teach mathematics when they entered their methods class.

In order to teach mathematics teachers need not only to be able to solve the problems themselves but to explain the underlying concepts to students. Lacking meanings to guide their thinking and suggest ways for designing meaningful experiences for children, the instructional approaches to mathematics typically utilized by teachers are predominately procedural and algorithmic – replicating the procedurally oriented instruction which they themselves received. Furthermore unlike practicing mathematicians, teachers typically perceive problem solving as recalling rules and applying them in terms of word structures rather than the underlying information communicated by the problem situation itself (Stipek, Givvin, Salmon, & MacGyvers, 2001).

Any serious attempt at improving the preparation of mathematics teachers must take into account the unique requirements of the subject and the dual nature of its' content. Furthermore, an extensive and focused effort must be made to educate and inform potential teachers of the essential conceptual components which live beneath the procedural rules with which they are familiar.

Knowledge and Beliefs

Over the past 20 years this author has interviewed over 450 teacher candidates and 100 practicing teachers and has identified a consistent pattern of beliefs held among both teachers and teacher candidates. Among those beliefs, the following were common and provide further evidence the dichotomy between "school mathematics" and "real mathematics":

- 1. Mathematics is computation. The computational form is of critical importance.
- 2. Mathematical problems should be quickly solvable in just a few steps.
- 3. The goal of doing mathematics is to obtain "right answers."
- 4. Patterns are sufficient evidence for accepting a rule. "If it works a few times, it works all the time."
- 5. During professional in-services their role is to passively receive mathematical knowledge from experts and to demonstrate that it has been received by replicating the activities in their own classes – but without transferring the underlying concepts to other content areas.
- 6. Solving problems consists of recalling and applying specific algorithmic rules that relate to specific kinds of problems.

As indicated earlier these two world views have great impact on the classroom environment. "School" mathematics is predominately based upon behaviorism and information processing. The goal of instruction in such programs is to explicitly enable the student to reproduce pre-defined procedures and sub-skills which are taught in isolation and practiced until "mastery" is achieved as measured by some arbitrary cut off score. The onus of putting the myriad isolated subskills together into a coherent set of problem solving abilities is left with the student and is not explicitly addressed. In "Real" mathematics the underlying theory of knowledge is considerably more constructivist and social in nature with the goal of enabling students to draw from a wide variety of experiences and flexibly utilize information to solve a broad variety of problems.

The implications of these philosophical differences continue to have major impact impacts the values held from each perspective. In accord with an information processing perspective, school mathematics values computational accuracy and efficiency. Assorted "tricks of the trade" and "shortcuts" are often utilized which, although successful in promoting efficiency, bypass the construction of meaningful understandings. In real mathematics the value is placed upon persistence and resourcefulness. Unlike the belief held by teacher candidates that all mathematical problems should be quickly solvable in just a few steps (and with only integer answers), the problems of the mathematician often require months and years of persistent effort prior to solution. Speed is often perceived as a drawback, as it replaces careful logic with hastily applied generalizations which may not be valid for the entire scope of the problem under consideration.

This desire for speed in computation helps explain the value placed upon memorization of facts, equations, and algorithms in school mathematics. Such memorization and the associated rapidity of recall definitely provide an initial speed advantage for the student when confronted with a simple problem stated in canonic form. Speed alone, however, does not in and of itself aid in problem solving for this initial advantage in speed is negligible when either a computer or calculator is present to level the playing field. The emphasis in real mathematics lies in using the principles of mathematics to reason from external situations and objects toward a non predetermined solution – not in the speed with which a calculation is performed.

It is also important to also realize where the "right answers" live in each of these two systems as this defines knowledge within each perspective. In school mathematics the justification for the "right answers" are nearly always external to the learner. Students often justify their answers by referring to such sources as their teacher, the "smartest" person in their class, the back of the book, or a calculator. When pressured on how they can tell their work or answers are correct they rarely refer to an internal justification or sense making effort. In real mathematics determination of right and wrong is made by the individual based upon logical reasoning from actual situations and well understood and applied mathematical principles. External sources are helpful, but the final judgment call is made by the individual and further supported or disallowed by the community of mathematicians.

In school mathematics problem solving is easily defined – the ability to decode and solve word problems of a specific type, subject to well known and over-learned procedures, within narrowly defined answer sets. Problem solving in the real world culture is not so easily pinned down. Often the problems themselves are ill defined, and require much research prior to attacking. It is not uncommon to find that the solution to one problem leads to other, even thornier, situations. Problem solving in this world is a complex interrelationship of situation and developing understandings which require an active synthesis of knowledge and skills using considerable creativity and experience.

It is generally accepted in real world mathematics that computers are valuable tools and should be fully utilized in problem solving. This is bounded by the need for the user to have carefully thought out the scope of the solution and the logic to which the computer will be let loose upon to do the odious task of "crunching the numbers." It is difficult to imagine, for example, what progress could have been made in fractal geometries, chaos theory, or catastrophe theory if the mathematician would have been burdened with the entire set of calculations. In School Mathematics, however, technology is viewed with some derision. The belief that using a calculator or a computer would be "cheating" is commonly held.

Instructional Methods

Many approaches in mathematics teacher preparation attempt to address the aforementioned requirements and beliefs through use of a conceptually focused mathematics methods course. Once such a philosophy is adopted, the day-to-day life in the classroom is profoundly and significantly altered for both methods instructor and teacher candidates (Cobb, Yackel, & McClain, 2000). These alterations go far beyond such superficial aspects such as the physical arrangement of workspace within the classroom, or the heavy use of manipulatives and incorporation of technology.

Such an adoption brings with it changes in foundational views of what constitutes an acceptable student product and the nature of the mathematics which is to be learned. Four of the core strands in this effort are an increased focus upon mathematics as problem solving, mathematics as communication, mathematics as reasoning, and mathematics as connections. These serve as conduits through which candidates learn the nature of the mathematics to be taught. In classrooms reflecting such an approach both active instructors and teacher candidates should be seen with all parties selecting problems with proven mathematical payoff to investigate, and the candidates bringing to bear the entire communicative, problem solving, reasoning, and connecting skills they possess.

As problem solving, particularly in group settings, and communication become more important, the use of manipulatives and sketches takes on a new interpretation. The heavy emphasis upon manipulatives provides students with a new set of "tools" to think with and to make their thinking external to share with other. Furthermore, these tools by their very nature are developmentally appropriate and provide representational power of important underlying mathematical concepts.

Together with an increased emphasis upon communication we see a shift in the teacher–student interaction patterns during mathematics instruction (Walmsley & Muniz, 2003). Historically, mathematics has been content driven and instruction was driven by teacher presentations of problem, solution, and judgment of answers. Students knew they were correct if their answer matched either the teacher, the back of the book (i.e., answer key), or that obtained by the brightest kid in class who everyone knew as just naturally "getting it." In this classroom environment discipline was simply defined. Since the dialogue was one way, only one voice – the teacher's needed to be heard. Since the teacher was the source of answers, student input was in many cases tolerated at best. Being content driven, the problems used in instruction tended to be those that best exemplified the content requirements, not necessarily the demands placed upon a learner of that content. This resulted in the prevalent use of abstracted problems, often of little relevance to the world of the student.

This is in marked contrast to a conceptually driven approach. Here, with the emphasis upon problem solving, reasoning, connections, and communication, there is a definite need for the dialogue to be at a minimum two directional – between the teacher and the students – and in most cases multi-directional with the teacher acting as facilitator guiding the discussion in near talk show fashion between groups of students bringing their own methods to bear on the problem of interest.

In this highly active, dynamic setting the teacher's role becomes that of source of questions, not final arbitrator of answers. The teacher must be able to maintain discussion on the problem at hand until a fully justified resolution is obtained, often using manipulative and representational reasoning "tools." The students' role must be to explain, not replicate. Discipline in this type of classroom must support, not suppress, discussion as these roles require an environment supporting free and open discussion. Furthermore, decisions ideally must be logical, based upon readily observed natural consequences, and take place in an environment where the students are expected to use a broad variety of representational objects as tools to "think with."

A major goal of this type of instruction is to enable successive internalization and abstraction of the preliminary physical experiences the students share. For example, instruction might begin with a series of bridging sketches which draw representational power from earlier experiences with physical objects. After working with the sketches a mental representation is encouraged which reflect the sketches and manipulations performed by the students. The interrelated nature of these experiences set the stage for abstractions and the intuitive foundation upon which the abstractions could safely rest. These abstractions, rather than being based upon a single demonstration of rules, rested upon a tightly woven network of understandings.

An explicit instructional objective must be to help each student find a way to answer the question, "How can you tell for yourself?" for all portions of the mathematics they were learning. This belief, coupled with the earlier described curriculum focus, lead to the following principles:

- 1. The instructor must not explain. Rather, the instructor must serve as a problem poser, skeptic and question asker focusing upon students' explanations.
- 2. Actions upon developmentally appropriate objects should be used define meanings associated with mathematical symbols and operations. Problems should be developed requiring an appeal to those objects and meanings.
- The instructor must encourage students to internalize and abstract their experiences by requiring them to work problems in the absence of the physical materials.
- 4. A meaning-centered evaluation scheme should be adopted.

Classroom Environment and Technology-Enhanced Mathematics Classrooms

Despite progress in both software and computer hardware there persists a negative view toward the use of technology on the part of many practicing mathematics teachers and instructors of mathematics methods. This continuing bias exists for a wide variety of reasons including the historical use computer based tutorials for "drill and kill" in the area of mathematics, programs that emphasize procedures over problem solving, and lack of student centered construction of meaning evidenced in many programs. This is a sad state of affairs for when thinking of reasoning, problem solving, communication, and connecting related ideas, the tool of choice in nearly every discipline is web enabled applications.

Unlike the traditional calculator, modern classroom technology has an unparalleled ability to implement both representational and procedural components of mathematics understanding in a single unified object. By students' creation and utilization of mathematically relevant computer-based objects, this dual encapsulation provides a unique opportunity to see both the form of representation and actions utilizing this representation simultaneously.

When viewed from the perspective of traditional mathematics instruction the calculator proved to be a relatively benign invention and did not require a significant revision of either curriculum or methods at the foundational level. The computer, with its increasingly powerful objects of thought, is a much more insidious problem as it allows students to leverage their thinking forward through interaction with tools which themselves have rudimentary problem-solving abilities. Furthermore, the data organization made possible through technology leads approaches with known mathematical pay-off. However, it is the responsibility of mathematics educators everywhere to ensure that our teacher candidates, teachers, and students are able to use the tools and not be used by them (Connell, 2001).

Evaluations and Assessments

Evaluation as used in traditional instruction often appear designed to identify and reward "winners" over "losers" using information acquired from measures of success or failure on narrowly prescribed sets of cognitive tasks. When every child is to be given the chance to construct the necessary understandings to make them a "winner," however, this approach is not overly helpful.

When paper and pencil tasks are used exclusively for evaluation it is difficult to determine whether a student understands conceptually, or has made inadvertent errors. However, when paper and pencil tests are supplemented with interviews teachers are able to group students on the basis of their conceptual understandings. The students soon come to realize that it is important to search for meanings when they are evaluated with respect to their understanding as well as their skill at producing answers. Thus, interviewing helps students as well as teachers by focusing their attention on the things that matter most.

Assessments do not always have to be at the individual level. When treated as data within a larger evaluative system it is often possible to include group level assessments quite successfully (Johnson & Johnson, 2004). It is of primary importance in any evaluation scheme that no single assessment stand as the sole measure of student success. Despite a preponderance of such uses resulting from high stakes testing this approach nearly always results in a reversion to the most easily measured mathematics topics and measures of process over concept.

Biographical Note

Michael L. Connell has served as Associate Professor of Education and Program Area Chair for Mathematics Education at the University of Houston. After receiving the BS and MEd degrees from the University of Utah he served as a teacher, Mathematics Specialist and Technology Director in Salt Lake City, Sandy and Panguitch, Utah. Following the PhD from The University of Illinois at Champaign-Urbana, he joined the faculty of the University of Utah in 1989 and 5 years later, came to the University of Houston. His research centers on the intersection of mathematics education, educational information technology, and learning theory. He has served as a *Fellow of the Utah Policy Center*, a member of *IBM's Educational Advisory Board*, and *Section Area President for Mathematics* in the Society for Information Technology and Teacher Education (SITE).

Dr. Connell was a co-developer of the Texas teacher development modules for Algebra I and the Middle School Mathematics Curriculum for Texas, funded by the Texas Education Agency and has a long history of district and state level teacher inservice projects. He is committed to teacher education in site based settings and has taught in the teacher preparation program at the University of Houston since 1995.

He has received numerous honors, including the *Outstanding Achievement Award* from the Association for the Advancement of Computing in Education (AACE) for best work in putting theory into practice. His paper *Teaching instructional design*

using technology was awarded the Best Paper Award by the Society for Technology and Teacher Education (STATE) and the paper *True collaboration: An analysis of a conceptual change program in elementary mathematics* was recognized as a Distinguished Paper by the Association of Teacher Educators (ATE).

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TEACHING SCIENCE

John P. Keeves and I Gusti Ngurah Darmawan

Introduction

The teaching of science in schools in most countries changed markedly during the last four decades of the twentieth century. The first 60 years of that century gave rise to many remarkable advances in science, not only with respect to basic scientific principles, but also in the applications of science to technology for military purposes and the growth and development of living organisms. This led to major changes in an understanding of scientific processes, the rejection of positivism and greater recognition of the contribution of science to economic and technological development. Consequently, in the late 1950s it was widely recognized that the teaching of science in schools must also change. The major changes that occurred were: (a) the teaching of biology in schools with an ecological focus to replace the teaching of botany, zoology and physiology largely to girls, (b) the teaching of science related to the earth, the solar system, the universe and the environment, (c) the teaching of an integrated science during the early years of secondary schooling, rather than the teaching of only physics and chemistry as the basic sciences, (d) the teaching of elementary science during the primary school years, replacing the study of nature, and (e) a greater emphasis on inquiry and investigation in the learning of science. Unfortunately, the applications of science both in everyday life, in technology and in conservation of the environment were often overlooked in the new courses that were introduced. However, after 20 years of intense activity world-wide, the movement for change in the teaching of science lost momentum in many countries of the Western world. This was at a time when the developing countries were searching for leadership and for advances in the teaching of science to support their economic and technological development that involved the uses and applications of scientific knowledge and the processes involved in scientific inquiry.

At the beginning of the twenty-first century the teaching of science can be said to be in a state of crisis. This situation has arisen from a growing shortage of science teachers in the physical sciences and mathematics, that has resulted both from the retirement of teachers who were educated during the peak years of reform in science teaching and who were attracted to the teaching profession, as well as from the higher financial rewards that were available in the fields of technology and commerce which

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had become oriented to science-based development. Furthermore, today the teaching and learning of science is too often seen as a field that involves only what takes place in a classroom and is thus divorced from a world that is changing rapidly as a consequence of continuing growth and development in the fields of science and technology. The authors adopt the view that it is both incomplete and inadequate to consider the learning of science as involving only those practices associated with the teaching of science in classrooms and laboratories. The media, the internet, peer group activities, investigation centres, field displays and museums all have a central role in the teaching and learning of science by children and by adults throughout their lives, because the fields of science are advancing at a rapid rate. The learning of science in schools is critical for all that follows outside the classroom and at later stages of life and that is related to scientific and technological development.

A Brief History of the Teaching and Learning of Science

The introduction of the widespread teaching of science in the schools in the Western world would appear to have developed from the appointment of von Humboldt as Director of Public Instruction in Prussia in 1808. Although he held office for only a brief period, he reformed secondary education and subsequently university education in Germany. The philosophical writings of Fichte, Goethe and Schiller and their influence on the educational philosophies and pedagogies advanced by Herbart, Froebel, and Pestalozzi had a profound influence on German education at all levels (Boyd, 1952; Curtis & Boultwood, 1964). Goethe, in particular, was extremely critical of both the approaches advanced by Newton and the established churches towards science, and he viewed science as a highly inductive and holistic process based on observation of the natural world and demonstration experiments (Bortoft, 1996). These advances in philosophy and pedagogy in Germany led to the establishment in the nineteenth century, with parallel developments in Sweden and in other parts of Western Europe, of separate schools for the teaching of science as distinct from classical studies that had previously dominated European education in schools and universities. This also led to the recognition that science had an essential place in secondary education, with nature study being taught in primary schools (Jenkins, 1985). It was not until the 1870s that Arnold, an English inspector of schools, advocated the adoption in England of the teaching of science at the secondary school level as was taking place in German schools. However, the science content taught in German secondary schools, particularly in the physical sciences, was based on lectures and the observation of demonstration experiments in specially designed tiered lecture theatres, an approach that was widely adopted in continental Europe, with less emphasis on laboratory training and the design and conduct of experiments by students (Westaway, 1929).

In England in the 1870s, T.H. Huxley, a great advocate of scientific inquiry and the theory of evolution, and an outstanding lecturer, argued strongly for the inclusion of science in the curriculum of the secondary schools. Huxley stressed the importance of training students to conduct their own experiments in a laboratory and to be trained in the use of their eyes, their senses and their hands in the learning of science. Moreover, Armstrong (1903) an English chemist, advocated a discovery approach for the teaching of the scientific method of inquiry. In this way the foundations for the teaching of science through laboratory work, rather than through demonstration experiments were laid down in English secondary schools that were slow to incorporate science into their curriculum, in part, because of the special facilities required that were costly to provide and maintain.

During the latter years of the nineteenth century and the early years of the twentieth century, American scholars studied in German universities and learnt about the developments in science teaching in both German schools and universities and in other parts of continental Europe. The so-called 'land grant colleges' that had been created under the Morrill Act of 1862 in the United States initially sought to provide instruction in the mechanical arts, military science and agriculture. The universities, together with these newly established colleges endorsed the teaching of science in schools with an emphasis on practical work, in the separate disciplinary areas of physics, chemistry, astronomy and natural history, including botany, zoology and physiology (Bybee & De Boer, 1994) in the late 1890s. This pattern of teaching the sciences at the middle and upper secondary school levels in the United States in a so-called 'layer-cake' pattern prevailed throughout the twentieth century in spite of efforts made to view science as an integrated field.

German approaches to the teaching of science were adopted in most countries of Europe with some variation in Eastern Europe, where Physical Geography was taught as a science, and in Russia, where experimental Psychology was included as part of the science curriculum in secondary schools. From Germany, England and the United States the teaching of science subjects in schools spread throughout the world, with American approaches commonly replacing English traditions in science teaching in some countries during recent decades. This resulted in less emphasis on laboratory work and often reduced emphasis on demonstration experiments, with a greater reliance on an attractively presented text book, as commercial publishing houses saw the secondary school market as a highly profitable one. The perhaps surprising result of the developments that occurred during the twentieth century and that have been based largely on German, British and American approaches and their derivatives has been the emergence, in the main, of a largely common curriculum in the fields of science throughout much of the world. This is not surprising since there is considerable agreement about the content of scientific knowledge.

Differences Between Countries

The differences between countries in their approaches to science teaching lie in three main areas. First, there is today the issue of whether science is viewed as an integrated subject or as clearly separated sub-disciplinary fields. Second, there is the question associated with the role of laboratory work, observation, and the classroom demonstration of experiments that emphasize inquiry in the teaching of science, or whether science is largely taught from a text book, far removed from direct observation and experimentation. Third, there is the issue of whether there is a commitment to a scientific method, and to problem solving as advanced by Dewey, that science can be seen as a series of steps, namely (a) defining a problem, (b) stating a hypothesis or model, (c) collecting data, (d) testing the hypothesis, (e) drawing a conclusion, and (f) applying the findings.

Alternatively, does the learning of science merely involve each individual constructing his or her own ideas through discussion in a classroom situation and working from a text book in order to build up a body of knowledge about science, as is widely adopted under a constructivist approach to the teaching of science.

Research in the field of science education has exposed the shortcomings of some science teaching that results in serious misunderstandings about scientific concepts and relationships that arise from the various ways of teaching and learning science. An approach involving the construction of ideas in a social group through discussion which is widely referred to as 'constructivism' appears to have been derived from Piagetian research and transmitted to modern educational thinking through the field of sociology in Germany and by the writings of Habermas (1992) on critical theory, and Vygotsky (1962) in Russia, which has developed into 'social constructivism'. In its simple form, some of what is involved in a constructivist approach to science education is merely good teaching and also appears to have been derived from ideas advanced by Dewey. However, the important issue is whether consensus in the classroom group determines what is an acceptable or adequate understanding of a scientific concept and its relationships, or whether the understandings held by individual students and expressed by the classroom group are consistent with the meanings held in the scientific community and tested in the real world. We argue that the textbook must serve to state these meanings. An individual's understanding of a concept or relationship must be testable against observation, sense perceptions in a variety of situations, and evidence derived from an experiment, as well as against the statements made and the understandings formulated in the scientific community. It is the coherence and consistency of this understanding that is essential. Such understanding can be clarified by discussion and reading, because deep understanding frequently forms slowly, but the essential feature of scientific knowledge is that it is testable against evidence derived from the real world for coherence and consistency.

The meaning of a concept or a relationship does not stand in isolation since it is part of a theoretical framework, and the relationship is frequently combined with other kindred relationships in the form of a model, with the model holding a place in an associated body of theory. The model, like each component concept, needs to be submitted to testing both logically and against empirical evidence. The model, or indeed the concepts and relationships, do not represent so-called 'truth'. Truth is unknowable, the model and the concepts involved in the model can only be examined for their adequacy. During the second half of the twentieth century the idea of an immutable body of knowledge in science was held to have little meaning, and together with the idea of a tightly specified scientific method that would establish the fundamental principles of science, were both largely rejected because of the probabilistic and stochastic nature of many scientific phenomena. The advances in science were recognized as being made through the investigation of patterns and regularities, and the testing of models of the phenomena under investigation in the natural world.

On Understanding Science

Possibly the most significant book, published during the twentieth century to change an understanding of the nature of science and scientific investigation, as well as the application of scientific principles was Conant's (1947) work *On Understanding Science*. This work clearly arose from discussions during World War II and gave rise to the subsequent seminal works on the nature of science by Kuhn (1957, 1962). Moreover, it led directly to the development of curriculum materials for senior high school students on the *History of Science Case Studies* (Klopfer & Cooley, 1964), a *Test of Understanding Science* (TOUS) (Klopfer & Cooley, 1963) and the preparation of the senior high school course *The Project Physics course*, *Text* (Rutherford, Holton, & Watson, 1970). Furthermore, the issues raised led to greater interest in the processes of science alongside content (Klopfer, 1971), and the rejection of a naïve acceptance of a scientific method of investigation and inquiry. Furthermore, it led to a restatement of the scientific process, the consideration of the roles of models and the teaching of the fundamental scientific concepts of reference frames, interaction, systems, equilibrium, steady state and feedback that permeate all fields of science (Karplus, 1969).

The Modern Science Curriculum

No longer is science in schools being viewed merely as an important initial step in the training of professional scientists and technologists. It is now widely recognized in the European community that all young people need to develop the life skills involved in the capacity to draw appropriate and guarded conclusions from evidence and information given to them, to criticize claims made by others on the basis of the evidence put forward, and to distinguish opinion from evidence-based statements. Science has a particular part to play here since it is concerned with rationality in testing ideas and theories against evidence from the world around. This is not to say that science excludes creativity and imagination (Programme for International Student Assessment, PISA, 2003).

The Programme for International Student Assessment (PISA) was set up by the Organization for Economic Cooperation and Development (OECD) to monitor literacy in the fields of Reading, Mathematics and Science and to conduct testing programs at regular intervals. PISA has received strong support from most highly developed countries of the world as well as many developing countries with well over 50 countries being actively involved in this ongoing monitoring of the learning taking place in schools. In the fields of science its testing programs defined scientific literacy as follows:

Scientific literacy is the capacity to use scientific knowledge, to identify questions and to draw evidence-based conclusions in order to understand and help make decisions about the natural world and the changes made to it through human activity. (PISA, 2003)

This definition of scientific literacy comprises three aspects:

- (a) scientific knowledge or concepts,
- (b) scientific processes,
- (c) situations or context.

The first two of these aspects are directly involved in the development of science curricula as well as in tests of achievement in the field of science. The third aspect serves to ensure that in the development of a science curriculum attention is paid to locating in the real world those aspects of science that are taught, learnt and assessed in a wide range of settings and that are relevant to the needs, interests and aptitudes of the students involved.

The statement issued by PISA (2003) identified 13 major scientific themes for the assessment of science performance at the 15-year-old or middle secondary school level, and for students to consider before leaving school at the end of the stage of compulsory schooling in most highly developed countries:

- (a) structure and properties of matter (thermal and electrical conductivity),
- (b) atmospheric change (radiation, transmission, pressure),
- (c) chemical and physical changes (states of matter, rates of reaction, decomposition),
- (d) energy transformations (energy conservation, energy degradation, photo-synthesis),
- (e) forces and movement (balanced and unbalanced forces, velocity, acceleration, momentum),
- (f) form and function (cell, skeleton, adaptation),
- (g) human biology (health, hygiene, nutrition),
- (h) physiological change (hormones, electrolysis, neurons),
- (i) biodiversity (species, gene pool, evolution),
- (j) genetic control (dominance, inheritance),
- (k) ecosystems (food chains, sustainability),
- (l) the Earth and its place in the universe (solar system, diurnal and seasonal changes),
- (m) geographical change (continental drift, weathering) (PISA, 2003).

This list is not necessarily comprehensive, nor does it indicate all the knowledge that can be or needs to be related to each theme, and subsequent testing programs may well change some of the themes included. However, this list does very clearly identify those major scientific ideas that students need to be familiar with in order to understand the issues currently being debated and that currently influence the lives of young people around the world. It excludes premature specialization and requires the teaching of a broad field of science during the first 4 years of secondary schooling (Grades 7–10) as well as during the years of primary schooling. Such a specification of content can well be questioned for being too ambitious. However, its relevance is probably beyond challenge. In the longer term, the preparation and publication of such a list seems to continue to unite across the world the teaching of science. Moreover, other attempts to formulate the nature and purposes of scientific literacy in educational programs tend to become superficial and lack relevance.

In addition, the PISA (2003) statement identifies three key processes associated with scientific literacy:

- (a) Process 1: Describing, explaining and predicting scientific phenomena,
- (b) Process 2: Understanding scientific investigation,
- (c) Process 3: Interpreting scientific evidence and conclusions.

Of considerable importance under Process 2 are the uses of conceptual models, the design of experiments to test the models, the role of theory and the limitations of scientific knowledge. These processes of science challenge the ideas of social constructivism and the ideas promulgated by some religious and ideological groups, and are consequently likely to be controversial. However, an understanding of the nature of scientific processes appears to be a necessary requirement for living in the modern world. While it can well be suggested that both the content and processes outlined above extend beyond the curriculum in science for some 15-year-old students, it must be argued that for nearly all people in highly developed countries, education must be considered to be a life-long process with more than 80% of an age cohort holding an expectation of undertaking education at the tertiary or post-secondary levels at some time in their lives. Consequently, the teaching of science in schools during the years of compulsory schooling needs to lay down the foundations through science courses for the continuing study of science beyond the years of formal schooling. Moreover, programs for the teaching and learning of science throughout life need to be largely common across both the developed and developing countries of the world. It would seem extremely unfortunate if the PISA testing program should ever abandon this bold concept for science education world-wide that it has advanced, because it serves to unite the teachers and learners of science across the countries of the developed and developing world.

The Science Curriculum

It is widely accepted that all students who have progressed beyond the first 3 years of schooling and continue at school to the completion of the period of compulsory schooling need both to be taught and to learn science. It is with this period of compulsory schooling that this chapter is primarily concerned. Nevertheless, the following discussion of the science curriculum, in the main, applies also to the initial years of schooling as well as to the upper secondary school level where some specialization in the learning of science is likely to occur. The discussion draws on the ideas advanced by Tyler (1949) and elaborated on by Bloom and his colleagues (Bloom, 1956; Bloom, Hastings, & Madaus, 1971), in part because this approach, while challenged by some, is widely accepted in both the developed and developing countries across the world. Moreover, this approach has had continuing and evolving recognition for approximately two thirds of a century, since it was first advanced for the evaluation of the Eight-Year Study in the United States (Aikin, 1942) in the 1930s.

While many of the basic ideas advanced by Tyler and the teams who worked under him remain, new ideas have been introduced and have been acknowledged by Tyler (1994). These changes in the approach to curriculum planning, instruction and evaluation have evolved because greater understanding of the processes of teaching and learning has occurred as a result of the growing body of research findings that has been assembled during the intervening years not only in the fields of science itself, but also in education and psychology.

It is important to recognize that during the twentieth century not only has the size of the school-aged cohort of young people grown at a remarkable rate across the world, but the demand for participation in education during the 12 years of schooling has also grown at an astounding rate (Connell, 1980). In addition, because of the demand for scientific and technological education in order to sustain economic growth (Hanushek & Kimko, 2000) as well as to advance human well-being and development (Keeves, Njora, & Darmawan, 2003), the teaching of science has been extended downwards into the early years of primary schooling as well as into the upper years of secondary education for all students in many countries. No longer are the fields of science and technology being viewed as exclusively for boys, because it is widely recognized that girls can perform at similar levels to boys in the different fields of science and mathematics (Baker & Jones, 1993) and that their participation in science and technology is needed to sustain economic development and to advance human well-being (Hanushek & Wössman, 2007).

The Curriculum Diamond for Science Teaching

The teaching of science involves much more than is commonly considered in terms of the methods of instruction in a classroom situation. However, the focus in the discussion that follows is largely restricted to school learning and does not immediately apply to the learning of science in the home, through the peer group or through the mass media as well as through investigation centres. Moreover, the teaching and learning of science must be argued to be a complex process in which the statement of (a) curriculum objectives, (b) the specification of content and skill-based outcomes and standards, (c) the employment of appropriate approaches to teaching, (d) the assessment of student performance, and (e) the systematic evaluation of the whole of the curriculum as well as its separate parts and their interactions, are all involved. In Fig. 1 the authors have shown these different components of the curriculum diamond that is developed from the curriculum triangle first advanced by Tyler (1949), and that contains the five domains listed above as well as the components and fields associated with each of the domains.

In this chapter the components under consideration are related in the classroom to those specific aspects, publications and theories that are widely used in the development of school curricula in science. Fig. 1 shows for each of the five domains those relevant components. The learning of science, while most closely related to the teaching approaches, cannot be meaningfully considered unless the whole of the science curriculum across the 12 years of schooling is taken into consideration. The major problem that has emerged in the introduction of change in the schools that has taken place during recent decades has been that the domains are frequently seen as separate entities and isolated from the whole. The many interactions between the domains and the components cannot be ignored in any discussion of science teaching and learning since they are central to curriculum change and development.

Curriculum Objectives

The curriculum objectives must be identified and specified after a consideration of scientific theory. This involves the holding of an understanding of the nature



of science that is consistent not only with the procedures employed by scientists in their research, but also with the understandings of the nature of scientific processes held by philosophers of science. Here we take the tactics and strategies advanced by Conant (1947) and developed by Kuhn (1962) and formulated in a 'web of belief' by Quine and Ullian (1978) to be relevant. We have previously noted that there have been and still are differences of opinion about the strength and meaning of these processes and the ideas and relationships involved. However, with respect to the content and processes of science that should be considered during the years of compulsory schooling and beyond, we are guided by the PISA (2003) statements on science and scientific literacy.

Nevertheless, we argue that the most coherent and readily acceptable statement with respect to content and processes involved in science education has been made by Rutherford and Ahlgren (1990) in *Science for All Americans*, believing it to be consistent with Conant's work (Rutherford & Ahlgren, 1990, p. xviii) and concerned with scientific literacy that involves a broad coverage of: (a) the field of mathematics, (b) the field of science, (c) the physical setting, (d) the living environment, (e) the human organism, (f) human society, (g) the designed world, (h) the mathematical world, (i) historical perspectives and with (j) the common themes of systems, models, constancy, patterns of change, evolution, and scale. However, to these ten aspects of the science curriculum must today be added, the field of technology and, in particular, information and communications technology.

The processes involved in science learning have generally been given less emphasis to curriculum development than to the content presented to students, with the consequence of reduced consideration being given to practical work in the science laboratory in the teaching and learning of science. The *Science, A Process Approach* curriculum advanced a hierarchy of process skills of observing, informing, classifying, predicting, collecting and recording data and measuring as the basic skills, and with the integrating skills of controlling variables, interpreting data, defining operationally, hypothesizing, and experimenting, leading on to the drawing of conclusions, generalizing and subsequently the applying of findings (Gagne, 1963, 1965).

During the second half of the twentieth century other curriculum development projects, not only in the United States, but also in England and Australia sought to introduce process-oriented curricula. Many teachers, parents and scientists contended that an inquiry-based curriculum sacrificed the learning of important content to a gain in process skills. However, the findings from a comparative evaluation of three activity-based process-oriented curricula (Bredderman, 1983) reported that the SCIS (Science Curriculum Improvement Study) led by Karplus and Thier (1967), that combined process skills with a conceptual approach, yielded greatest gains in both the learning of content and in logical reasoning. This approach employed learning cycles and built on Piaget's research into cognitive development, and involved an exploration phase that was followed by the introduction of concepts and relationships and subsequently by a concept application phase. A major review after 25 years of use of process-oriented elementary science programs in the United States by Shymansky, Hedges, and Woodworth (1990) found that process-based curricula had a strong impact on performance in science learning, including academic achievement,

process skill development, and attitudes both to science and to the learning of science.

Klopfer (1971), working in collaboration with the planning of the First IEA Science Study (FISS)(Comber & Keeves, 1973), developed an extended set of processes each with several sub-processes:

- (a) observing and measuring (five sub-processes),
- (b) seeing a problem and seeking ways to solve it (four sub-processes),
- (c) interpreting data and formulating generalizations (six sub-processes),
- (d) building, testing and revising a theoretical model (six sub-processes),
- (e) applying of scientific knowledge and methods (three sub-processes).

The body of content that was taught in the developed and developing countries in the early 1970s was also identified in the Klopfer (1971) grid.

Klopfer (1971) sought to combine together both content and process skills in the structuring of curriculum objectives and his framework not only has been used in subsequent IEA studies (Rosier & Keeves, 1991), but still provides a sound basis for the development and evaluation of science curricula across the world. However, the rich body of content involved in the science curriculum tends to crowd out the learning of the processes of scientific inquiry that can best be taught and learnt through working in a laboratory-based situation. Nevertheless, the identification of many of the processes that are aspects of the PISA (2003) program of assessment of scientific literacy suggests a returning in emphasis to the processes of inquiry in science teaching, alongside an emphasis on content.

The failure to specify a clearly stated body of content, or the teaching of content without a clearly identified set of processes appears to accept that science itself has a dualistic nature in which content and process are separate entities. It seems to be more appropriate to see content and process as a duality within the whole science curriculum. Content and process are interrelated through inductive and deductive thinking not only in the learning of science but also in the construction and usage of sciencific knowledge and thought in (a) everyday life, (b) research in the fields of science, (c) applying scientific ideas and principles in the advancement of technology, and (d) confronting such issues as climate change and global warming. Social constructivism with its seemingly distorted view of the nature of science, and its reliance solely on inductive thought from among the members of a classroom group is an inadequate approach to science learning and teaching (Gibbons, 2004; Matthews, 1998; Phillips, 2000).

Teaching Approaches

While it is recognized that there is no single approach to science teaching that is ideal in all situations, it is necessary to clarify the objectives of science teaching and to be guided by those objectives in developing appropriate methods of teaching formally across the years of schooling and beyond in non-formal learning situations, as well as in informal learning at successive stages throughout life. Moreover, it is necessary to recognize that there is a growing understanding of the working of the brain through research in (a) neuroscience, (b) cognitive development arising from the seminal work of Piaget and the scholars who have followed in this field, (c) the role of language through the work of Vygotsky (1962) on group interaction and the zone of proximal development, and (d) the work of Sweller (1999) on cognitive load theory These approaches are giving rise to new thinking about how science can best be taught.

The nature of general as well as specific cognitive processing skills and their interrelations has been a focus of psychological research for a century or more and has been clarified by the work of Carroll (1993) and Gustafsson (1988, 1994). In addition, the development of intellectual functioning with age, which has emerged from the translations of the work of Inhelder and Piaget (1958, 1964) and extended in the subsequent translations of the work of Piaget and Inhelder (1974, 1976), was made widely accessible during the latter decades of the twentieth century through the writings of Hunt (1961) and Flavell (1963). Many scholars in the United States have challenged aspects of this work, particularly the simplistic interpretations that would appear to have underestimated younger children's limitations, because they were said not to have reached a particular stage of cognitive development. However, research has continued in this field and many of the common misunderstandings have been clarified. Consequently, it is widely accepted that the findings from the field of cognitive development can and need to contribute to the approaches employed in the teaching of science in the classroom. Brown, Campeone, Metz, and Ash (1997) pointed out from an examination of the total body of Piaget's work that an optimistic picture of children's capacity to learn science during the primary school years was obtained. However, formal logical operations are rarely within children's grasp at this stage. Nevertheless, it is possible to build on children's strengths and science can be taught and learnt effectively at the primary school stage, although Piaget would appear not to have recognized the power of social interaction in the classroom on the development of thought (Brown et al., 1997, p. 19).

Shayer and Adey (1981, 2002) recognized that the Piagetian perspectives were inadequate for the learning of science in schools and for accelerating cognitive development across the period of compulsory schooling from ages 5 years to 15 years. They argued that the work of Vygotsky (1962) on thought and language and the zone of proximal development associated with the distance between the actual level of cognitive development and the level of potential development at that time, needed to be taken into consideration by teachers in the teaching process as well as in the planning of the curriculum. Consequently, Shayer and Adey (2002) argued that much was to be gained from using the ideas of both Piaget and Vygotsky, with Piaget's ideas on the nature of cognitive development along with Vygotsky's ideas being employed in fostering the acceleration of cognitive development (Shayer & Adey, 2002, p. 188), particularly in the learning of science and mathematics.

Intervention activities need to be incorporated into the teaching situation to accelerate cognitive development through the planning of the teaching of the scientific processes at the appropriate stages in the learning of groups of children in classrooms, with recognition that much is to be gained from the social interaction within a group. Furthermore, it can be argued that the field of neuroscience is likely to continue to contribute to an understanding of the operations of teaching and learning, with the OECD continuing to maintain the publication of reviews of research along with psychological studies in the field of the development of learning abilities in children (Brown et al., 1997) and the development of the understanding of abstract ideas (Vosniadou, 1997). The planning of approaches to teaching needs to draw on the ideas of both Piaget and Vygotsky, as well as the pedagogical practices advanced by Adey and Shayer that are grounded in long periods of developmental activity in the teaching of science and mathematics in the United Kingdom.

Research into Teaching and Learning Science

A considerable number of research studies were carried out into instructional strategies for teaching science during the twentieth century. Armstrong's advocacy of the so-called 'heuristic' or 'discovery' approach to the teaching of science that was based on the teaching of the scientific method through investigatory activities in science laboratories (Armstrong, 1903; Van Praagh, 1973) influenced science teaching, particularly in England. However, as a strategy for the teaching of science it was perhaps too simplistic and unrelated to the stages of cognitive development of the students. Likewise, constructivism, inquiry and investigative approaches, student centred and student interest and more formal didactic approaches to instruction, in the main, accepted a dualistic view of the objectives of science teaching. These approaches considered the content and the processes of science as separate entities and failed to acknowledge content and process as a duality with the two aspects being intertwined in different ways at different stages in the teaching to, and the learning of science by students of different aptitudes, abilities and interests. The development of such a curriculum is a complex task with no simple solution and with the need to ensure that adequate curricular coverage is provided for both content and process, without encountering the problems associated with working memory capacity (Pascal-Leone, 1976) and cognitive load (Sweller, 1999).

An examination of the effectiveness of science teaching in many countries has been carried out through an analysis of the video records obtained in the study of the teaching of science undertaken by the Third International Mathematics and Science (TIMSS) 1999 Video Study (Lokan, Hollingsworth, & Hackling, 2006) conducted under the auspices of the International Association for the Evaluation of Educational Achievement (IEA). In the report of the findings of this study the following statement was made (Lokan et al., 2006, p. xxii) about science teaching in Australia.

There was limited scope for students to formulate their own research questions, devise their own experimental procedures and analyse their own data because practical work was largely teacher-directed. Furthermore, in half the Australian lessons in which students did practical work there was no public discussion of conclusions. These features of science lessons limit the opportunities for students to learn inquiry skills and develop scientific literacy. Given the centrality of inquiry-based learning in Australian science teaching, the commitment to scientific literacy and the emphasis on independent practical work, there appears to be a need to allow more student directed investigations and classroom discussion of the results and conclusions arising from the practical work to ensure that scientific concepts underlying investigations can be developed.

This statement in the report of a large cross-national research study reveals the need to be able to examine and relate the methods of teaching employed to the curriculum objectives of science teaching in a school system. Furthermore, the video-recorded observations that were systematically analysed can be seen to yield valuable information on the methods of teaching employed in different countries. Moreover, the relevance of the method of teaching for scientific literacy is noted in the above quotation. In addition, the interrelationships between the teaching and learning processes and the development of the scientific concepts involved in an investigation are raised in this statement.

Outcomes and Standards

The third domain of the Curriculum Diamond for Science Teaching presented in Fig. 1 is concerned with the formulation of the outcomes and standards that relate to the science curriculum. Two components are involved in conceptualizing the domain associated with the identification of outcomes and standards. The first component is concerned with the underlying structure of the observable learning outcomes. Since learning is a cumulative operation in which new learning is built upon prior learning, the learning outcomes and standards of performance must have a hierarchical or taxonomic structure. Within each strand associated with a field of learning there may be one or more substrands. Each of the substrands is expected to be correlated with the others and it is not a requirement that the substrands should be completely independent or orthogonal. Thus, in the teaching and learning of science, where science forms the main strand, the substrands of physics, chemistry, biology and earth science, that are traditionally employed, have sufficient in common for inter-correlations to be observed. However, the substrands have traditionally, but not necessarily, an ordered structure. While the substrands can be expected to be unidimensional they can be further subdivided, for example, physics can be divided into motion, energy, heat, light, sound, electricity, magnetism and atomic or nuclear physics. Nevertheless, it is necessary to examine whether such substrands are meaningfully ordered through testing empirically the relationships involved with evidence collected from students and teachers, using appropriate Rasch scaling procedures that are considered below.

In addition, there is a further structure associated with both the conceptual development of students and the sequencing in which instruction traditionally occurs. In the domain briefly considered in the previous section that is concerned with Teaching Approaches, the stages of cognitive development, initially advanced by Piaget and Inhelder are discussed. Since these stages are meaningful and supported by research and experience, cognitive development is also an appropriate and necessary basis on which to order the learning outcomes. However, some empirical testing of the order of the different learning outcomes, and whether they lie along a single dimension is necessary. These two aspects must be tested, namely, (a) the underlying basis for the order in a strand or substrand, and (b) the conformity of each of the identified learning outcomes or standards along a single dimension, and in the specified order. Biggs and Collis (1982) developed a taxonomy for the structure of observed learning outcomes (SOLO). They argued that the quality of learning depended not only on the quality of instruction, but also on aspects that were intrinsic to the learner, including the learner's developmental stage and prior knowledge. Associated with the maturation of particular brain structures (Epstein, 1978) and learning experiences both inside and outside the classroom, each individual student formed a system of rules of increasing complexity that governed the thinking of the student. Biggs and Collis (1982, p. 31) argued that the stages of cognitive development, and were developed in different ways. As a consequence, they were stated using different terms. However, the correspondence of this taxonomy of learning outcomes with the stages of cognitive development must guide the approaches to teaching and provide a sound basis upon which the expected outcomes and standards of teaching and learning can be based.

Little has been written about the testing and internal validation of outcomes and standards with respect to conformity to a structure that is unidimensional and with respect to the ordering and spacing on a scale of measurement. Measurement implies the use of an equal interval scale, and the procedures proposed initially by Lawley (1943) using a normal distribution function and subsequently by Rasch (1960) using a logarithmic function have permitted the calibration of outcomes on a unidimensional scale. The great advantage of the Rasch scale lies in the simplicity of the algebra associated with the logarithmic function, together with the simplicity of meaning involved in the consideration of the logarithm of odds that is closely linked to the probabilistic nature of students' responses to learning. These properties ensure that the scaling procedures are more appropriately applied. However, a lack of understanding of the nature of the scaling procedures has led to increasing criticism of the use of outcomes and standards as a domain in the development of the school curriculum. This is in spite of the fact that E. L. Thorndike drew attention to the importance and significance of standards in teaching and learning in schools over 90 years ago (Munroe, DeVoss & Kelly, 1924). Bond and Fox (2001) in a book titled Applying the Rasch Model: Fundamental Measurement in the Human Sciences have presented a clear exposition of the uses of Rasch scaling procedures, but they did not directly discuss this aspect that involved the testing of the structure of the outcomes and standards of the school curriculum. Moreover, Willis and Kissane (1995) reviewed research into Outcome-based Education that considered models for judging students' achievements and were critical of norm-referenced assessment, criterion-referenced assessment, and school-based assessment using personal judgement, but failed to consider the need to calibrate the outcomes on a scale of measurement that could be achieved by Rasch scaling and that was attempted by the assessment procedures that they rejected. It is clear that outcomes and statements of student achievement need to be set on scales of performance with strong measurement properties if student learning is to be meaningfully examined as an important domain of the school curriculum. Furthermore, the curriculum outcomes and the standards sought must lie on a scale that is consistent with the assessment indicators of student learning.

Assessment of Performance

If the learning of individuals is to be investigated meaningfully over time then measurement must be made on an interval scale without a floor or a ceiling. Several works provide introductory presentations to Rasch scaling: Bond and Fox (2001), Masters and Keeves (1999), Spearritt (1982), and Thorndike (1982). These procedures can be employed in scoring: (a) multiple-choice tests with dichotomous responses or with polytomous scoring in which partial credit is given; (b) constructed response tests with both dichotomous and polytomous scoring; (c) extended answer questions with up to nine score categories supported by rubrics; (d) essay type questions in which the first four moments of the score distribution are used in calibration; (e) projects and portfolios that are calibrated in a similar way to essay type questions; (f) practical work tasks that can be scored in a variety of ways; and (g) attitude scales that involve responses that are polytomous rating categories or paired comparison ratings. The uses of Rasch scaling procedures beyond multiple choice tests with only two response categories are not widely known, because of the commercial dominance of the three parameter item response theory approach.

The extended article by Klopfer (1971) on the evaluation of learning in science is referred to in previous sections since it has the valuable feature of a detailed treatment of the processes involved in the teaching and learning of science as well as an extended listing of the content associated with the science curriculum. The processes and content involved in the science curriculum are combined in the form of a grid and are not considered to be separated from each other. This grid considers the content and processes of science teaching as a duality in a curriculum framework that can be employed for the specification of the objectives of the science curriculum across the 12 grades of schooling. However, Klopfer's article has a further important feature in its presentation of a very wide range of sample test items that cover the content categories which are crossed with the knowledge and comprehension categories advanced in the taxonomy of educational objectives by Bloom (1956) in the cognitive domain alongside the science processes of manual skills, attitudes and interests and orientation towards science. The statement of manual skills, attitudes and interests and orientation components, together with the processes provide for a view of science teaching that extends well beyond the teaching and learning of content knowledge and understandings. We argue not only for the consideration of the objectives of a very rich science curriculum, but also for the assessment of student performance in appropriate ways in all areas. However, within this framework the design of instruments for the assessment of student performance in the teaching and learning of science is a formidable task.

Evaluation

Consideration of science teaching as portrayed in the Curriculum Diamond in Fig. 1 is incomplete without some discussion of evaluation. The use of the term 'assessment' is generally considered to apply to student performance, whereas the use of the term 'evaluation' is considered to apply to science courses and the curriculum

either as a whole or in its parts. The four domains of the science curriculum, namely, the objectives, the teaching and learning approaches, the statement of outcomes and standards, and the assessment of student performance are interconnected with each other as shown in Fig. 1. Change in one domain may well involve change in the other domains. Deficiencies in one domain may also be a consequence of short-comings in other domains. The use of the term 'evaluation' implies the consideration of values as well as the effectiveness of teaching in the classroom situation and learning both inside and outside the classroom.

Statements by Tyler (1949) opened up an area in educational research associated with the 'basic principles of curriculum and instruction'. Many of Tyler's original ideas were distorted in practice, and Tyler's partial restatement (Tyler, 1994) of his ideas, 40–50 years after his initial publication, helped to emphasize and clarify the basic principles that he advanced and that were derived from the experiences obtained during the Eight Year Study (Aikin, 1942). Curriculum design and development is currently a highly controversial issue. In the field of the Science curriculum, where marked advances have occurred during the past century and at a time when there is a heavy demand for scientifically trained personnel, controversy is extremely strong. Recent developments in the field of information and communications technology (ICT) have advanced a new approach to curriculum research that is referred to as 'design-based research' which is highly relevant to educational evaluation (Design-Based Research Collective, 2003).

Issues Associated with the Teaching of Science

This chapter in the discussion presented above seeks to advance a framework for the consideration of critical issues that have arisen across the world in the teaching and learning of science. During the twentieth century the marked developments in technology, and in the latter decades of the century in information and communications technology (ICT) in particular, has generated not only a demand for people who have the skills as well as the foundational knowledge derived from the learning of science, mathematics and ICT in schools and in institutions of higher education, but also have the interest to work in an ever changing field that involves technological development. In order for countries to sustain high levels of economic growth that leads to increasing the well-being of their people as well as increasing the level of human development across the world, this demand must be met. Consequently, there is pressure to increase not only the levels of participation and attainment in science, mathematics and ICT of those people required to meet this emerging demand, but there is also the need to advance awareness and a greater understanding of science in the whole population of the world concerned with the role of science in a changing world.

The closing section of this chapter discusses several critical issues that, during the first decade of the twenty-first century, have become prominent in the field of science education and are concerned with the teaching and learning of science.

The Two Cultures of the Sciences and the Humanities

The advances in knowledge during the early decades of the twentieth century led to academic specialization, particularly in English-speaking countries at the school level, from the lower secondary school stage and upwards to the university level. Students and staff were required to specialize on the one hand in the study of science and mathematics or on the other hand in the study of the humanities, the social sciences and languages. Snow (1959, 1964) from the problems that he experienced as an administrator during the Second World War in England, became acutely aware of two distinct cultures not only in academic institutions, but also in the wider circles of government. The problems associated with the formation of two cultures extended into the secondary schools and from there to the general population. While the solution to these problems lies in part through the implementation of a policy of 'science for all' across all years of schooling from the lower grades through to the terminal secondary school level, a case is still to be argued for the introduction of broader based courses during a first degree in institutions of higher education in may parts of the world.

It seems to be highly desirable that all students and staff, whether they are science specialists or not and whether they focus their learning and teaching on science or the humanities, or the social sciences should develop an understanding of the relationships that exist between science, technology and society. This should not only include an awareness of what Conant (1947) referred to as the strategies and tactics of science, but also the more recent ideas advanced by philosophers and historians of science and by sociologists concerned with the nature, development and transmission of knowledge, and the history of ideas.

Views of Science Portrayed by the Mass Media

A second issue that is related to the existence of the two cultures involves the muddled views of science that are frequently expressed in the mass media with respect to such topics as global warming, climate change, nuclear energy, and genetically modified crops. The media have publicized these topics and promoted debate. What is missing from the debate is the knowledge available to consider in a meaningful scientific way the resolution of the issues raised. Without an informed public, there is little chance that resources can be made available for sensibly examining these topics. Science and science education must accept some responsibility for control instead of catastrophe in these situations. However, science teaching, in order to ensure that a more meaningful view is presented, must be seen as part of lifelong and recurrent education using the press, radio and television as well as the internet and further education courses where in-depth consideration is given to such issues. The school science curriculum is already over-burdened. Nevertheless, in the schools it is important that such issues are not ignored. Soundly based scientific information is required for use in debate before decisions are made, instead of allowing the more sensational and erroneous views to dominate the debate and lead to the making of decisions that have unforeseen and unfortunate consequences.

Creationism and the Rejection of Evolution

One issue that has emerged during the past 150 years involves the rejection of the scientific support for the idea if evolution. The nature of constructivist thought and the use of constructivism, more especially, social constructivism have been raised in previous sections of this chapter. It is argued that constructivism, except in its common sense aspects that merely involve the recognition that individuals must develop their own understanding of scientific ideas and relationships, ignores the need to test ideas and relationships against evidence obtained from the real world. Evolution has a substantial body of coherent logical argument and empirical evidence supporting its acceptance, while creationism involves ideas and relationships that have not been and cannot be subjected to test and possible refutation. Unless ideas and relationships satisfy the virtues of simplicity, generality, coherence, fruitfulness and testability (Quine & Ullian, 1978) they cannot be accepted as meaningful knowledge. Creationism, although strongly supported by some religious beliefs cannot and does not satisfy these requirements for acceptance as soundly based knowledge, by its lack of being amenable to testing. Such beliefs only warrant consideration within the fields of religious ideology. One of the purposes and functions of science teaching is for students to learn to submit ideas and relationships to logical and empirical testing before accepting them as meaningful and useful, with only a degree of adequacy, and not being confirmed and being said to be 'true'.

The Role of the Laboratory in Science Teaching

Teaching through investigation in a laboratory and through the demonstration of ideas and relationships, as well as the testing of ideas and relationships through observation, measurement, and experimentation are costly of time and equipment, even if testing is through demonstration to a class group rather than being carried out by each individual student in a laboratory or in field trial situations. Consequently, with a science curriculum that is overladen with content, and taught in circumstances where time is limited, both laboratory work by individual students and demonstration experiments by students and teachers are commonly ignored and teaching in the science classroom is largely undertaken through discussion and reliance on a textbook. Even the use of a text book is frequently limited if financial support to purchase the appropriate books is not available. Under these circumstances the testing of ideas and relationships against logical and empirical evidence is largely ignored. Thus in many science classrooms while the content of the science curriculum is presented to students, the processes of science are ignored. As a consequence, the nature of scientific inquiry is never understood by students, who may perform well in examinations without ever grasping the underlying principles on which scientific knowledge is based.

In-service and Pre-service Teacher Education

The failure to be taught in a laboratory situation in both pre-service and in-service education in the field of science, generally results in some teachers being trained in

programs that prepare them for teaching students in schools never being exposed to the underlying ideas and relationships associated with scientific experimentation and inquiry. Consequently, these would-be teachers of science never accept the basic principles of scientific investigation other than those ideas that are presented in written text and classroom discussion. The processes of science, the nature of inquiry, and the need to test ideas and relationships before accepting them as meaningful and as soundly based knowledge are not built into their thinking in such a way that it permeates their teaching. Many of the problems that are encountered in the teaching of science at different levels in school classrooms arise from the inappropriate preparation of some teachers of science, both through pre-service and in-service education programs, that are not based on the principles of inquiry, investigation and the testing of ideas and relationships both logically and empirically.

The Teacher Shortage Problem

The shortage of teachers of science and mathematics at the primary school level as well as at the upper secondary school level is a result of (a) students staying longer at school, (b) the expansion of the teaching of science from being an optional subject at the lower and middle secondary school level to being a compulsory subject, (c) teaching science in the primary school from Grade 3 onwards, and (d) the policy of 'science for all' throughout the secondary school years. These changes have given rise to a serious unmet demand for science and mathematics teachers in schools throughout the world for 30 and more years. This problem is currently accentuated in many countries as a consequence of the retirement of an older generation of teachers. These teachers have not been gradually replaced by the recruitment of younger science and mathematics teachers, because those younger teachers with science and mathematics backgrounds can readily find more lucrative employment in other science related occupations. There appears to be no simple solution to this problem, other than substantial salary supplementation for those teachers who are capable of teaching science at the upper secondary school level as well as at more junior levels.

Sex Difference in Participation in Science Courses

The view that the study of the physical sciences was not for girls was engendered in school curricula throughout the world during the early decades of the twentieth century. There would seem to be little reason for the sex differences that are found in science classrooms other than the effects of views associated with differences in gender roles in society that have been built up over the past 100 years and more. The attribution of such effects to genetic and neuro-physiological factors appears to be only weakly supported by the findings of research in these fields. However, there is growing evidence of the influence of societal and classroom teaching effects. Consequently, largely through changes in policies operating within schools, there has been a gradual increase in the participation of girls in science classes in the physical sciences and of boys in science classes in the biological sciences. This shift on the part of girls may be due to the increase in the range of career opportunities that arise from the study of mathematics and the physical sciences together with greater financial rewards. Nevertheless, a significant imbalance remains with boys tending to study the physical sciences and not the biological sciences and girls tending to study the biological sciences rather than the physical sciences. Furthermore, girls prefer to enter teaching as a career rather than boys, with the result that more women are available to teach in the biological sciences and the teaching of the physical and earth sciences has suffered.

Linking together the Sciences, Mathematics and ICT in School Classrooms

One of the issues currently being addressed in the teaching of Science and Mathematics involves the question of whether it is more effective and efficient to advance the teaching of each of these two subjects through the use of information and communications technology (ICT) at the secondary school level. This approach involves the use of technology to test models through computer simulated exercises that enable mathematical and scientific relationships to be examined not only by logic in the case of mathematics and by laboratory experimentation in the case of science in order to establish the strength and meaningfulness of the relationships under consideration. This involves the use of so-called 'thought experiments' and has recently been traced back to the writings of Archimedes (Netz & Noel, 2007). Preliminary work suggests that this approach forms a teaching method that in the case of mathematics interests students and leads them to think more creatively and to form their ideas more quickly than is achieved through the traditional use of more formal logical procedures. The same applies to certain aspects of science where formal logic is employed. Moreover, in the field of science the same approach replaces expensive and time consuming laboratory exercises through the use of simulation procedures that have growing acceptance in much modern scientific inquiry. However, both in the learning of mathematics and science it seems unwise to divorce the experiences of the students from the real world. In part this can be achieved through an emphasis on application, an aspect that was frequently overlooked in the reforms introduced during the 1960s and 1970s. Furthermore, the teaching and learning of mathematics has largely been divorced from the real world through an excessive emphasis on logic, and students have commonly challenged the relevance of their learning to the world in which they live. The same has been true but to a lesser extent in the fields of science.

Integration of the Teaching of Mathematics and Science

A further recent development has involved attempts to integrate the teaching of science and mathematics. However, experience has shown that some mathematics teachers strongly reject such an approach. Nevertheless, it must be accepted that the past three decades have seen remarkable changes in the use of computers in schools in spite of considerable opposition, particularly in some teacher education programs.
Whether this opposition will be maintained in spite of the increasing acceptance of ICT by students in their homes, and by industry and commerce, remains to be seen. Moreover, ICT may provide a means by which through simulation mathematics and science can be linked together in primary and secondary school classrooms. Traditionally science has been taught through observation and experimentation in laboratories with the testing of ideas and relationship against empirical evidence collected from the real world. However, in many schools the use of laboratories for the teaching of science in a systematic way has died out. In mathematics, support for mathematical ideas and relationships at the secondary school level has been gained from logical argument and formal proof. This too has declined, probably because many secondary school students have been found to encounter difficulties in working with logical argument. The use of computer-based simulation may provide an approach to the teaching of science and mathematics together through the examination of problem situations, particularly problems of special interest to adolescent students. This approach can certainly assist in reducing the highly abstract nature of much science and mathematics classroom learning. Nevertheless, it is unclear as to whether this is a useful way to proceed.

The Introduction of Psychology into the School Curriculum

There is an emerging demand for psychology to be introduced into the school curriculum, particularly with a growing interest in the findings being advanced from research in neuroscience. The introduction of psychology from this perspective implies that the subject is largely being viewed as a science, in which experimentation can be undertaken and empirical evidence can be used in the testing of ideas and relationships. However, it is also possible for psychology to be taught from the perspective of the social sciences. Under these circumstances empirical evidence is tested with statistical inference and this has implications for the teaching of mathematics, with the ideas of probability forming the fundamental basis of the work involved. Nevertheless, the introduction of psychology into teaching and learning programs at the secondary school level is not widespread, but the emergence of a problem in this area seems likely to develop over the coming decades.

Conclusion

Since 1850, the teaching of science in schools has grown to become a major issue in education across the world because of the demands for strongly educated personnel to work in the fields of science, technology and other scientifically-based professions. In addition there is a wider population who need to be well-informed in order to make decisions on problems that involve an understanding of issues that are of importance for human well-being. The teaching of science in schools has over much of this period been focused on the fields of physics and chemistry and during the past 40 years the teaching of biology has been developed, with the field of earth science having only a minor place in the science curriculum. However, the greatest problems

to be faced by the coming generations of students in schools and universities during the early decades of the twenty-first century are likely to be in the field of earth science. These problems involve global warming, climate change, the fresh water crisis, the feeding of a rapidly growing world population, managing limited energy and mineral resources, and the increasing risk of national disasters. It can be argued that we are at a crossroads in human history and the resolutions of these problems require knowledge of the earth sciences and the monitoring of changes in the environment in which we live. No single approach to the science curriculum or to science teaching in schools can provide a completely satisfactory response to the problems and issues that today exist in our world.

Tyler in helping to shape the National Assessment of Educational Progress in the United States introduced the idea of monitoring the effectiveness of educational programs. Likewise, the work of Husén in Sweden, Peaker and Postlethwaite from England, and Bloom and Thorndike in the United States has helped spread this vision of monitoring change and development in education through the research programs of IEA. More recently the programs supervised by Plomp from The Netherlands through the IEA studies, and Schleicher from Germany through the PISA studies have maintained and developed the idea of monitoring education not only in the developed countries of the world but also in the developing countries of Africa, Latin America and Asia. Some argue from ideological perspectives that the teaching of science is of secondary importance and that the monitoring of change in science education is likely to yield little that can be used to raise standards of living and human development across the world or in a particular country. However, the recent World Bank publication titled Education Quality and Economic Growth by Hanushek and Wössman (2007) provides evidence from the monitoring of education in countries in different parts of the world that shows that the systematic monitoring of the teaching and learning of science is likely to make an important contribution to the future wellbeing of the human race. All are engaged in advancing that well-being through the processes of initial education as well as programs of recurrent and further education throughout life.

Biographical Notes

John P. Keeves is a Professorial Fellow in the School of Education at Flinders University. His research interests are wide and varied. From a very strong initial interest in Mathematics and Science Education, he has extended his field of inquiry in these areas from Australia to cross-national and comparative perspectives, and has as a consequence developed a strong interest in educational research methodology and measurement.

I Gusti Ngurah Darmawan is a Lecturer in the field of science and ICT education in the School of Education at the University of Adelaide. His research interests include science education, measurement, multivariate and multilevel data analysis, analysis of frequency and count data, sample design for educational survey research, and ICT in education.

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TEACHING ABOUT POLITICAL AND SOCIAL VALUES

Murray Print

Give me the child of today and I will give you the man of tomorrow

(Jesuit Saying)

Teaching about values is a vast undertaking and one that needs to be divided into more manageable sections as the editors have in this case. This chapter examines issues related specifically to the teaching of political and social values and while I draw upon some of the literature on values education more generally this is only to support the specific task at hand. Similarly, an examination of the teaching about social and political values necessarily draws upon school subjects as well as other aspects of the curriculum and the school to which the editors have allocated many separate chapters.

Therefore the focus will be issues of pedagogy, curriculum and educational policy as applied teaching social and political values in schools. Consequently the role of the teacher is critical in this discussion. Similarly, this chapter focuses upon teaching rather than the substantive nature of values and associated constructs. In this handbook there are separate chapters that concentrate upon areas such as moral & character education, teaching Geography, teaching History, Curriculum and teachers, multicultural classes, ethics and justice, the hidden curriculum, and democratic schooling. All of these also have significant components of teaching values within them.

Teaching Values

In most western countries the teaching of social and political values is a cornerstone of social education, though not exclusive to the teaching of social sciences in schools. In this chapter the focus, being on teaching, lends itself to a social education perspective. However, we need to be clear – teaching is a value-embedded activity. It has long been established that ALL teachers teach values, often directly and more commonly indirectly while students may also acquire values through the hidden curriculum (Goodlad, Soder, & Sirotnik, 1990; Gudmundsdotir, 1990; Print, 1993). As Veugelers and Vedder argued recently, "Teachers can never be value free; their values are reflected by their subject matters, their explanations and their behaviours" (2003, p. 386).

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching, 1001–1014.* © Springer Science+Business Media LLC 2009 Teaching social and political values in also highly contentious, even vexatious, as it brings out strong views in respective protagonists, many of whom are not educators and researchers but are more likely to be politicians, public commentators, journalists, radio talkback hosts, religious advocates, and the like. As the debate on the teaching of social and political values escalates, as if does from time to time, its highly problematic nature is readily evident due to two key questions: should values be taught explicitly? And, if so, which values?

Not surprisingly a common response to values education by teachers, particularly in the past three or so decades, has been one of careful avoidance. Clear statements to downplay values issues even to avoid direct values teaching, particularly where those may be controversial, were common amongst educational systems in the concluding decades of last century. However, the rise of political conservatism over the past decade has witnessed attempts to rekindle the direct teaching of values in schools. For example, the United States, Britain, Canada and Australia have all experienced a renewed effort by governments, regardless of political persuasion, to stimulate the teaching of social and political values. Nowhere has this been more obvious than over the past 5 years with the federally funded and inspired Values Education Study in Australia (Lovat & Toomey, 2007).

One further clarification is required. This analysis does not include the teaching of religious values which are a quite separate category. It also underscores the role played by social studies, social education, studies of society or similarly named school subjects in the teaching of social and political values.

Values Education in Schools

Values education is the teaching about values or valuing in the context of schools and a school curriculum. Pedagogically it can include values inculcation, values transmission, moral development, value analysis, values clarification and more recently, action learning. While a strong literature base exists in the field, it does not have a firm foundation in research. Undertaking research into teaching social and political values is problematic, invariably revolving around teacher perceptions, but little good evidence as to what works, what makes a difference, even what impacts and how on young people (Halstead & Taylor, 2000; Veugelers & Vedder, 2003). Clement (2007), for example, found in his review of research on values education and quality teaching, there is an abundance of research on the latter but little on the former, while Halstead and Taylor (2000) found research on values and the curriculum, and policy as well as pedagogy. However, as the authors noted, the quality of that research is very mixed, particularly relating to student outcomes.

Reviewing developments in values education over more than half a century several themes appear though they are far from clear cut and overlap occurs. Given that schools are a basic crucible for values development, essentially three main sets of forces have been operating over past 60 years:

- 1. Psychologists with a particularly cognitive view of values, values acquisition and consequently values education such as Piaget, Coombs and Kohlberg
- Social educators who engaged with teaching values in schools and who, in one sense, took responsibility for teaching social and political values

3. Religious values as part of religious ideology and doctrine. Not addressed here, but are linked with the revival of moral and character education

Post war developments in values education in western countries may be broadly categorized into sequentially linked chronological periods that dominated how schools and teachers addressed teaching social and political values.

1950s and 1960s – The dominant school mode was values transmission with values inculcation designed to produce values of the good citizen – conformity, civic participation, stability, civic responsibility; essentially building people of good, moral character. By late 1960s a change in attitude was increasingly evident reflecting the social revolution of the time, and the influence of psychologists such as Piaget.

1970s and 1980s – In a period characterized as self-fulfilment, social experimentation and increasing tolerance of difference, the dominant school mode was values clarification and awareness as well as consideration of Kohlberg's theory of moral reasoning. In broader society this period also witnessed growing awareness of the values of multiculturalism and associated tolerance, the rise of feminism and the values of alternative forms of political participation (non-compliance, demonstrations, civil disobedience and violence against elected governments). Yet later in the1980s society also witnessed the rise of values associated with instrumentalism, money, greed and conspicuous consumption.

1990s+ – The dominant school approach to values education may be characterized as essentially constructivist, with its acceptance of different values combined with aversion to the imposition of dominant social values on minorities. For teachers this has essentially meant attempting a value neutral position. Within this period critical pedagogy and critical thinking in values education, particularly amongst scholars, have also become influential, though a more direct approach to values education has also become apparent.

More specifically, in terms of teaching social and political values within schools, we are currently in a period built upon the past decade where scholarly, systemic and school interest has intensified in three directions. The character and moral education movement, often represented through community service or service learning, as in the case of the United States, has gained considerable support. This movement is about preparing good, moral people and is expressed in schools in the form of character education and service learning programs as seen in the work of Likona (1991); Wynne (1997) as well as the links between values and quality teaching (Lovat & Toomey, 2007). Invariably this approach has advocated more explicit social values be taught, with considerable less emphasis upon political values.

Second, reflecting changes in the workings of western democracies, the growing impact of international terrorism as well as the influence of globalization, demand for teaching democratic values to prepare active democratic citizens has increased dramatically (Patrick, 1999; Parker, 2003; Print, 2007; Osler & Starkey, 2006; Westheimer & Kahne, 2004). This second trend has also witnessed the noticeable involvement of governments in more active approaches to building active, democratic citizens, best seen in the citizenship education program in England (Crick, 1998; Kerr, 2000; McLaughlin, 2000; Pike, 2007). In these cases the emphasis has been upon democratic values, included within the broader rubric of citizenship values.

Third, associated with both above has been a call for more direct teaching of values in schools (Davies, 2006; Pike, 2007; Veugelers & Vedder, 2003). In particular, political forces and educational systems have advocated selected social and political values to be taught as seen in the VES in Australia (Curriculum Corporation, 2003; Lovat & Toomey, 2007). And simultaneously, some of the less effective efforts at different forms of teaching about political and social values has been highlighted in the literature (Pike, 2007; Print, Ugarte, Naval, & Mihr, 2008).

Theory on Teaching Values

The final report on the Australian Values Education Study (VES) noted, in an international context, that values education is an area "... about which much has been written but little is known" (2007, p. 33). This applies particularly to theory and research in values teaching.

A major difficulty encountered by theorists and researchers is establishing links between young people's values and the factors that influence the acquisition of those values. Establishing causal relationships between teaching and values is highly problematic and even correlational studies can make only the most tentative of claims (Leming, 1997; Lockwood, 1997). Today we still simply have insufficient information on exactly how values are learnt and what sources, or combination of sources, are the most influential in facilitating that learning process. Nevertheless, teachers and schools can effect values acquisition by their students and we need to explore the nature of those impacts.

Over the years many theories about how values may be taught have been proposed, but all have been significantly challenged. By the early twenty-first century a variety of approaches may be found in practice but no one theory dominates praxis. However, the ways schools approach values education in schools will be influenced by the theoretical basis of any values education strategy and consequently variation in what should and does constitute teaching social and political values.

Currently two broad theoretical approaches to the teaching of values (which excludes teaching of religious values as well as the modelling theory of learning values by students) may be discerned.

- 1. Cognitive developmental theorists, such as Piaget and Kohlberg, have advocated a reasoning approach to learning values in schools though with no specific values advocated. Theorists advocate strategies such as moral reasoning, values clarification and discussions of moral dilemmas. Essentially these theorists argue that the process of learning values is more important than the values acquired. This approach was popular in the 1960s and 1970s was applied for some time but is now less popular though still subsumed in many curricular approaches to values teaching.
- 2. The prescriptive approach argues that values should be taught deliberately in schools and that some values are worthwhile learning. Theorists argue that schools should teach through forms of direct instruction so that students will be deliberately exposed to important values, often utilizing specially designed curriculum programs. This is frequently the case with character education as advo-

cated by Likona (1991), Wynne (1997) and many others, though most advocates write from a pejorative perspective for as Lockwood (1997) notes, and Halstead and Taylor (2000) support, a dearth of research exists which directly connects teaching values and student values. As Lockwood comments "Research on the relationship of values to behavior shows no clear or direct connection between the two" (1997, p. 183). A decade later little has changed.

While there are many ways in which social and political values might be addressed by schools research indicates that schools have much to do in this area. As Halstead and Taylor commented, "First is the need for schools to have a coherent strategy for values education. There are strong empirical indications that bringing together a number of different teaching and learning approaches in a whole school policy is much more effective in influencing the developments of young people's values ..." (2000, p. 190).

Interestingly theorists generally have exerted little influence over teaching social and political values as both Leming (1997) and Lockwood (1997) noted, a situation which remains today. Teachers understand little of the different theories, even though they may apply elements through various learning–teaching strategies. As Halstead and Taylor noted, "The theories have generally had a very limited impact on values education in the United Kingdom, but the methods have wider relevance in a variety of contexts" (2000, p. 181).

In general, studies of what students learn and the most powerful influences over that learning, the importance of the teacher's role, has varied from insignificant to most significant. I take the view that teachers can be highly significant in influencing student learning depending upon many variables as evidenced by substantial research by Hattie (2004) as well as Rowe (2004). This is also the case with the learning of values in schools.

Political Socialization

In recent years a renewed interest in political socialization has become evident as researchers investigate the declining participation of young people in politics (Galston, 2004; Hooghe, 2004; Print, 2007; Saha, Print, & Edwards, 2005; Sapiro, 2004). Theorists, going back to the days of Parsons and beyond, have argued that as the young are socialized into the politics of society they maintain stability through the acquisition of values underpinning the political system. In school contexts curriculum theorists have long reinforced the adage, attributed to the Jesuits but common to most societies, which may be paraphrased as "give me the child of today and I'll give you the adult of tomorrow". This is essentially a statement of values education, one that focuses upon teaching social and political values. From political science, we need to briefly consider the concept of political socialization.

Political socialization is the processes by which individuals learn the political norms, values, and behavioural patterns of the nations, groups, and families in which they reside and hence form their political orientations. In particular it is a well recognized and studied phenomenon in political science to explain where children and adolescents acquire political cognition, beliefs, values, attitudes and behaviour. (Hooghe, 2004; Niemi & Finkel, 2006; Parker, 2003; Print & Coleman, 2003; Saha et al., 2007; Sapiro, 2004).

Recent research has examined the decline in political participation of young people, particularly in western democracies, and the relationship with learning and teaching political values, including build social capital (Print & Coleman, 2003). The agents of socialization which affect a child/adolescent are crucial to the individual's development in terms of future political behaviours. Some of the more significant agents include:

- 1. Family effects are widely recognized by theorists and researchers as the primary influence in the development of a child's political orientation, mainly due to constant relationship between parents and the child (Galston, 2004; Print, Saha, & Edwards, 2004; Saha et al., 2005, 2007; Sapiro, 2004).
- 2. Schools are potentially the most influential of all agents outside the family and in some situations (schools which actively encourage political learning) this is the case (Galston, 2004; Niemi & Finkel, 2006; Saha, et al., 2007).
- 3. Mass Media function as a political information-giver to adolescents and young children and is a highly influential force, particularly at certain times such as elections and political crises. The internet is potentially influential though at the moment research suggests its impact is limited, if increasing (Saha et al., 2007; Vromen, 2007).
- 4. Religion has been decreasing in influence for mass society, though clearly remains influential with certain groups within society and particular religions/religious groups (Saha et al., 2005). Other possible agents such as political parties and community groups appear to have little influence over young people's learning about politics.

In the context of this chapter I consider only the school but acknowledge there are other factors which influence political socialization, often more powerfully, than the school. In the research on youth political participation, for example, it appears that the family is considerably more influential over adolescent behaviour than is the school (Saha et al., 2005, 2007).

Approaches to Teaching Political and Social Values

The school has long been recognized as playing a central role in the process of socialization of young people into society. In this process the classroom teacher serves a critical role in the values development of young people within schools regardless of their professed positions on values teaching. Teachers affect the values acquisition of young people through the myriad of decision and actions they take on a daily basis. This occurs in two main ways, namely through curriculum and pedagogy which, in the context of schools, are difficult to disentangle.

Curriculum

Through a myriad of curriculum decisions, from what content to teach, to what examples to give to what books to use, the teacher and school influence the learning situation for students and hence the exposure they experience to values acquisition. But which values? Or as Westheimer and Kahne (2004) ask – "But what kind of citizens are the schools trying to shape?" As mentioned earlier the issue of values is highly contentious and contested. By analysing selected curriculum documents, frameworks, standards, as well as the relevant literature (Cogan, Morris & Print, 2002; Crick, 1998; Kerr, 2000; Naval, Print, & Veldhuis, 2002; Parker, 2003; Patrick, 1999; Westheimer & Kahne, 2004) it is possible to discern a pattern in the values identified within curricula or by advocates.

What social and political values are deemed important? Political values in the western democracies revolve around well-developed concepts of democratic values which facilitate the functioning of modern democratic states. Typical list of such values highlight the importance of democracy and include:

Individual liberty Rights and responsibilities Majority rules Minority protection Common good Human rights Social justice equity Tolerance accountability by authority, with checks and balances Multiculturalism and appreciation of difference Freedoms – speech, press, association, religion, and freedom from arbitrary arrest

In other regions, such as Asia, the Middle East and Africa, where democracies are less established, more recent or more fragile, these values hold less significance. For example, in many Asia countries, a school subject called CME – Civics and Moral Education – is quite common. This subject, or its variants, combine selected democratic/political values with others deemed more appropriate to the political and social context. These values included respect for the state, the common good, family obedience, respect for elders and the like, where the emphasis is more upon responsibilities, especially to the state, rather than individual rights (Cogan et al., 2002; Print, Leung, Sim, & Ishimine, 2007).

Similarly social values assist individuals to function within different social groups and are mainly about character – honesty, tolerance, trustworthiness, respect and the like. Again these are essentially western social values and other regions vary considerably in their assessment of what are appropriate social values to teach. For example, Asian values are arguably different involving more about the common good, respect for age and older generations, family cohesiveness, filial duty, and so forth.

An example of clearly articulated social values for teaching in a school curriculum may be found in the Values Education Study (Commonwealth of Australia, 2005; Curriculum Corporation, 2003). The social values advocated in this study are an example of western values, though with an Australian twist, and include:

care and compassion	respect
doing your best	responsibility
fair go	honesty and trustworthiness
freedom	understanding, tolerance and inclusion

integrity (Commonwealth of Australia, 2005; Curriculum Corporation, 2003)

Pedagogy for Social and Political Values

But how can such values be learnt and taught? What role can teachers and schools play in values acquisition? The teaching of political and social values may be conceptualised as a continuum of strategies ranging between maximal to minimal engagement with values. In terms of strategies these vary significantly with individual strategies ranging from direct instruction to indirect curriculum inclusion.

Conceptual Model of Values Teaching

Direct	Indirect
Instruction	Inclusion
Maximal Fig. 1	Minimal

 Direct instruction. May be considered as a maximalist approach to social and political values education through deliberate direct instruction of selected values. Invariably, as Halstead and Taylor (2000) note this form of values transmission is specifically designed to prepare "good" citizens for the future such as is the case with character education. This approach is particularly applicable to the teaching of political values and is often employed by governments that wish to more directly control their citizens.

The emphasis is upon direct instruction methods such as lectures, audio-visual materials, guest speakers and the like. Essentially these are expository teaching methods which, as Print (1993) identified, rely on the one-way flow of information to learners. While many teachers and schools favour this approach they often additionally include different pedagogical forms that engage students more actively as indicated below.

With direct instruction socially "accepted" values are inculcated directly as the basis of acceptable standards/rules for behaviour as seen in the Values Education Study (Curriculum Corporation, 2005). Teachers could be responsible for direct instruction to promote values such as care and compassion, doing your best, fair go, honesty and trustworthiness, integrity and respect.

Interestingly while direct values inculcation has become increasingly a feature of conservative governments over past two decades, Parker (2003) identified a similar need in the United States for multicultural values to be inculcated while several authors (Likona, 1991; Lockwood, 1997; Wynne, 1997) have identified a major initiative of direct values teaching through character education.

2. Student engagement. A variation of deliberately teaching social and political values is to engage with students on values topics. With these methods the emphasis is on providing opportunities to consider values, reflect upon them and hopefully acquire those that have been pre-selected, usually by the teacher and the curriculum. These methods are less direct, despite the deliberate intention to expose students to specific social and political values. There are several recognized methods for teaching political and social values through student engagement including:

- simulations replications of reality simplified
- role play students play roles, usually unscripted, on a values situation which is life-like e.g. discrimination
- group discussions students contribute to a guided discussion of a values topic
- controversial/critical issues are specifically identified for attention and then addressed usually through discussion
- fieldtrips heavily value laden activities to visit real situations such as Parliament House.

Research on these methods suggest they produce more informed and engaged learners (Hahn, 1998; Liu, 2001; Oser, 1994; Parker, 2003) and these methods are located towards the maximalist end of the continuum as they deliberately engage learners in specific values, though through a less direct approach than direct instruction. Nevertheless, pedagogies such as simulations, group discussions, roleplay and the like are quite highly controlled by the teacher with an intention of achieving a pre-determined value outcome.

3. Cognitive – developmental approaches to teaching values were more common in the 1960s, 1970s and 1980s. They revolved around values clarification approaches where students were encouraged to use rational thinking and reasoning skills. In this context valuing was essentially a cognitive process of determining and justifying facts and beliefs. The use of higher order cognitive skills to clarify and test value positions was important and encouraged.

Significant contributors were Maslow, Alport, Rogers, Simon. While these approaches are not as common now, they can still be found and parts are often integrated into more traditional strategies. For example a pedagogy with a strategy for students to reflect on their values and how they were formed such as values clarification and class discussions. Values clarification is an exercise in self-realisation, the exploration of one's values and the justification of those value positions. This strategy would be located towards the minimalist end of the continuum, with indirect inclusion of values mainly through a rationalizing approach of the individual.

Leming (1997) identified a substantial research base which investigated the impact of these approaches, particularly values clarification though most of these were conducted in the 1970s and 1980s. The results were largely inconclusive and Leming noted that the research has little impact on practice. By contrast the practice of values clarification was popular with teachers (Leming, 1997; Lockwood, 1997).

4. Moral development focuses on moral values particularly equity, justice, fairness, human dignity, driven by the early work of Lawrence Kohlberg (1984). Built on earlier work of Piaget, Erikson and others Kohlberg suggested six levels of moral

development to which humans should aspire. While it resonated at the time with educators it was difficult to translate into classrooms and a common form was the discussion of moral dilemmas (Leming, 1997). Subsequently components of moral development have become subsumed within character education and often employ community service/service learning as a strategy. The rationale is that students will build good moral character through contributing or service to the community

Moral development today is more a maximal approach to teaching values, relying on directly addressing preferred values, especially social values and is best found in character education. This approach is really a combination of pedagogies which revolve around the deliberate teaching of specific social values to achieve a pre-determined values goal, usually a "good" person. Such a person is one who exhibits the value traits of honesty, compassion, respect, freedom, tolerance and similar values as stated in the Values Education study (Curriculum Corporation, 2003).

5. Critical pedagogy sees reasoning as a sociopolitical practice (McLaren, 1994), a way of addressing social justice. Here the teacher takes a political position to contribute to developing social justice within students, perhaps as a goal advocated by Westheimer and Kahne (2004). From their research they argue that when preparing citizens for democracy through schooling it is not enough to build social and political values of personal responsibility and participation. Rather what democracy requires are citizens with the values of social justice who are committed to social and political change. As such, critical pedagogy moves beyond postmodernism and that movement's statement that society no longer has any fixed values, that all are relative, constructed in the reality of the individual.

Critical pedagogy contends that teachers cannot remain neutral in what is a political and cultural struggle (Veugelers, 2000). As an approach to teaching social and political values it relies upon a range of strategies which take a critical perspective to social and political values and include such approaches as class discussions, group discussions and the like as well engaging with post-modernism and feminism.

Critical pedagogy is also somewhat difficult to locate on the pedagogical continuum as it is clearly maximal in its deliberate intention to address specific values to achieve a goal. Yet it is fundamentally based upon a critical perspective, even constructivism and post-modernism and as such treats values relatively.

6. Curriculum inclusion. Imbedded within curricula documents and frameworks are social and political values. Often these are difficult to identify and distinguish as they are invariably not made clear within such documents as mission statements, frameworks, or standards though are nevertheless present.

For teachers this is akin to a "claytons" values pedagogy i.e. a values approach when you're not having a values pedagogy. In this sense teachers indirectly teach about values simply by following the prescribed curriculum with its multitude of imbedded values decisions. They may not perceive that they teach values directly at all, but the inclusion of some values material, and the exclusion of other material, nevertheless allows for a values approach. Consequently social and political values may be acquired by students through incidental, informal and hidden curriculum values acquisition. This may be considered the most minimalist approach and, as Print (1993) contends, is found in all school curricula.

Issues and Practical Implications

The teaching of political and social values is clearly an important component of what happens in schools and of the curricula utilized in schools. In the process of this analysis a number of issues have been raised which deserve consideration.

The relationship between teaching social and political values and student behaviour is clearly problematic. This is partly reflected in the variety of ways in which political and social values as taught in schools that use different definitions and theoretical bases to justify their approach. Approaches tend to be either from a prescriptive theoretical base such as direct instruction and character education or cognitive-developmental in theory producing more values clarification type strategies.

Second, the literature demonstrates clearly that the past decade or so has witnessed a growing move towards the direct teaching of specific social values in schools, as seen in changing nature of school curricula. Most clearly, however, this trend is closely associated with the growth of character education in the literature, school systems and individual schools (Taylor, 1998; Veugelers & Vedder, 2003; Howard, et al., 2004).

A similar trend in many democracies in recent years has witnessed the explicit involvement of governments in building political values amongst young people. This has most clearly evident through programs in citizenship education and the growth of curriculum resources for schools. The most notable examples are England's compulsory citizenship education in the national curriculum (Kerr, 2000; McLaughlin, 2000; Halstead & Pike, 2006) and Australia's civics and citizenship education through the Discovering Democracy program (Curriculum Corporation, 1998; Kemp, 1997; Print, 2007).

Yet simultaneously throughout the western world is significant evidence of declining political participation and problematic political socialization by young people (Galston, 2004; Hooghe, 2004; Saha et al., 2005) reflecting changing political values of this generation (Print, 2007; Print et al., 2004). The evidence collected over many years has led some governments to actively seek ways to build values-bases through schools to enhance levels of political participation by their younger citizens.

A fifth issue in the teaching of social and political values is the impact of globalization. Davies (2006) as well as Osler & Starkey (2006) and others (Cogan et al., 2002; Niemi & Finkel, 2006; Print et al., 2007) have demonstrated clearly the importance of global citizenship in building political and social values, particularly the development of social justice internationally. Yet research on the impact of intergovernmental agencies such as the United Nations and its Human Rights Commission by Print et al. (2008) identified a corpus of failure. Similarly, to address values beyond national borders in 2001 UNESCO passed a resolution affirming values of tolerance, universality, mutual understanding, respect for cultural diversity

and the promotion of peace (Resolution 39), all of which are central to UNESCO's mission and to the UN more generally. But to what avail? As Pigozzi (2006) noted, these values will only take hold if countries will ground them in commonly held values within countries which have been supported by a quality education system.

Finally it has been evident that teacher roles in the delivery of political and social values within schools remain problematic. Apart from those teachers and schools engaged in character education with explicit social values and some countries which have mandated citizenship education programs which include political values, the role of teachers in social and political values education is characterized by confusion, lack of professional preparation and, above all, avoidance. Ironically, despite teachers' deliberate intention of avoidance the literature reveals the reality, as Veugelers & Vedder (2003) highlight, is that all teachers, to varying extents, teach social and political values.

Biographical Note

Murray Print is the Director of the Centre for Research and Teaching in Civics in the Faculty of Education and Social Work at the University of Sydney. Professor Print has directed many projects in civics including *Values, Policy and Civics Education in the Asia-Pacific Region; Civics Education Assessment and Benchmarking;* the Consortium *Project in Civics and Citizenship Education;* the first phase of the *IEA International Civics Study;* and most recently a major ARC-funded project on youth participation in democracy.

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CONDITIONS FOR PROMOTING MORAL AND PROSOCIAL DEVELOPMENT IN SCHOOLS

Alan J. Reiman

Introduction

As Turiel (1998) notes, engaging education in the moral and prosocial domains is hard to fault. After all, it seems that everyone wants children and adolescents in their society to be guided in the process of becoming less aggressive, more empathic, more principled, more charitable, and more respectful of self and others. Although some have argued that education in the moral domain is not appropriate for schools because it should be a principal responsibility of the family and/or religious training, most educators now agree that character education takes place in schools, whether it is planned or not.

In this chapter, character education is broadly defined as encompassing all aspects of schooling that impact upon the development of prosocial and moral competencies of K-20 students, including the capacity to reason about moral and ethical issues. Democratic education refers to those deliberate school-based initiatives that are designed to promote the development of students into competent, responsible citizens in a democratic society.

The chapter examines a number of questions related to moral, prosocial, and character education. For example, what have been some of the challenges for character education? What can we learn from the historical record of such programs? What are the perceived professional responsibilities of teachers and educational communities related to moral, prosocial, and character education? What conditions promote growth of moral competence? What programs for moral and character education have moderate-to-strong research effect sizes, suggesting that they really do make a difference for K-20 students? Finally, can we be aspirational, envisioning what it means to be fully human as we forge learners' moral selves? In light of these questions, the chapter begins with a glimpse at some of the challenges character education is summarized. Acknowledging the expanding knowledge base, I then review how educators can proceed in more deliberative ways to promote moral, prosocial, and character education in school settings.

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The last 25 years of research in moral, prosocial, and character education suggest that it involves complexity and uncertainty that cannot be effectively engaged through simply telling students what is right or wrong (Lapsley & Narvaez, 2004; Lickona, 1998; Mosher, Kenny, & Garrod, 1994; Nucci, 2001; Rest, Narvaez, Bebeau, & Thoma, 1999; Smagorinsky & Taxel, 2005; Watson, 2006). In light of this accumulating theory and study (Killen & Smetana, 2006; Lapsley & Power, 2005; Solomon, Battistich, & Watson, 2001; Snarey & Walker, 2004), the fulcrum of this chapter is an examination of promising conditions for promoting K-20 students' moral, prosocial, and character development.

Challenges to Character Education

In the 1920s, Hugh Hartshorne and Mark May at the University of Chicago conducted a long series of studies (1928–1930) of character education. Their results were a bombshell because every study arrived at the same conclusion: formal character education had no effect. After studying over 10,000 children and adolescents in regular school classes in character education, Sunday-school classes, and other educational settings, they found no correlation at all between character education/virtue training and actual behavior. They also found that character education produced essentially no consistent sociomoral behavior in the same person from one situation to another. Essentially, the research suggested that moral behavior was unpredictable.

Reading stories about virtuous people is at best a vicarious experience. Likewise, resorting to lectures where virtues such as courage, openness, or respect are introduced lead to little change in students.

However, a criticism of Hartshorne and May's research was that testing situations did not really create a *battle of conscience*. In other words, the stakes were low, so perhaps students did not care about the results of the test. Such a finding, if proved, would undermine the results of Hartshorne and May's research. A study by Kohlberg and Candee (1984) tested this possibility. They built a special video game replete with computer-animated ray guns. The game was rigged to yield a score just below the level needed to win a prize as a sharpshooter. Over 80% of the students cheated on their reported score, as they struggled to earn the coveted prize of sharpshooter. This research largely confirmed the research of Hartshorne and May, suggesting that attempting to inculcate particular virtues amounts to superficial add-ons.

More recently, some educators have expressed concerns about character education's dual meanings in education. Its broad meaning refers to experiences that help children grow into good people. A narrower meaning denotes a particular style of moral training that reflects particular assumptions about children and how they learn. Specifically, the narrower meaning proposes acculturating students to conventional norms of obedient behavior. This second meaning implies control, restraint, and conformity. Kohn (1997) has scrutinized programs guided by these two different objectives. What he finds is that many character education programs are a "collection of exhortations and extrinsic inducements designed to make children work harder and do what they're told. Even when other values are also promoted – caring and fairness, say – the

preferred method of instruction is tantamount to indoctrination. The point is to drill students in specific behaviors rather than engage them in deep, critical reflection about certain ways of being (p. 2)." Often, such character education programs suffer from a character education formula that might be called, "If it is Tuesday, we must discuss honesty." As you can see, the formula is to target a value which is assigned for a particular day of the week. Curriculum developers have seized this narrower meaning as well. After all, developing a character curriculum that promises a quick fix through selected traits like obedience is attractive and marketable.

Kohn (1997) suggests that narrowly-focused character education programs, with their attention to traits such as punctuality and perseverance, amount to indoctrination. Interestingly, proponents of narrowly-focused character education programs agree with Kohn that the goal is indoctrination. Wynne (1985–1986) declares that "school is, should be, and must be inherently indoctrinative." Such proponents want to inculcate traits such as obedience. Some leaders of "Character Education as Indoctrination" go as far as stating that a "goal is to encourage conformity through repeated messages" (Cohen, 1995, p. 4). Kohn worries that these narrowly-focused character education programs may succeed in temporarily buying a particular behavior, but they do not leave children with a long-term commitment to that behavior. The child's words and actions are not sustained – much less transfer to new situations and settings – because the child has not been invited to integrate them into his or her moral structure (Kohn).

Research notwithstanding, contemporary efforts do make use of moral exhortation or a list of virtues as the core component of character education programs. Such efforts are common and find their way into schools and higher education. School-based efforts with character education that feature moral exhortation or virtue have been studied and have consistently been found wanting (see Table 1).

The somewhat arbitrary nature of virtue ethics may be the primary reason these approaches to character education hold so much attraction for educators. But such an approach leads to ethical relativism and is not guided by science as noted by Lapsley, "the language of character traits and of virtue, then, does not provide what is wanted -a

Program	Outcome
DARE programs to build character in order to resist drug abuse	No positive effect on drug behavior with early adolescents (Ennet, Tobler, Ringwalt, & Fiewelling, 1994)
"Values Clarification": Explore and identify each person's value structure through single curricular lessons	No change in either values or behavior. Program is viewed as highly relativistic and can only serve as a first step in a character education program (Edwards, 1995; Leming, 1993)
Ethics through readings: Examines lives of moral exemplars	No change in either values or behavior. Academic readings are too vicarious (Rest, 1986)
Direct instruction in common virtues, such as honesty and truthfulness, through lectures, moral exhorta- tions, and classroom rules	No positive effects upon attitudes or behaviors. Some positive effects on acquisition of information. Lec- tures are too passive to affect complex attitudes and behaviors (Leming, 1992)

 Table 1
 Selected character education programs with outcomes

Adapted from Sprinthall, Sprinthall, and Oja (1998)

way of protecting the autonomy of morality against all particularities. It does not provide, in short, the necessary ethical and psychological resources by which to combat ethical relativism" (Lapsley, 1996, p. 207).

Given the poor results of the bag-of-virtues approach, let us turn to some of the challenges and complexities of the constructivist approach with its broader definitions and goals. Kohn (1997) argues that constructivists should be taken more seriously. The constructivist view of character education suggests that students must think about moral problems rather than be indoctrinated into a set of absolutes. Likewise, they need to be supported as they learn prosocial skills associated with respect for self and others. Further, scholars from the constructivist arena have initiated careful study of this broader meaning of character education during the past 35 years. We will examine some of this research which focuses on helping students construct prosocial skills and moral understanding. Know, however, that some traditionalists claim that constructivist approaches are relativistic. Their worry is that if we let students construct their own meanings, then we are saying that anything goes, and morality risks collapse into a cacophony of personal preferences (Kohn). Yet constructivists have noted their approach is not relativistic. In reality, constructivists are committed to empirically understanding which conditions actually promote long-lasting change in students prosocial, moral, and character development (Kohn).

As you can see, there are strong allegiances in the character education movement, and there are important differences of opinion about approach. Perhaps the biggest contrast regards the inherent differences between *education* and *indoctrination*. Does history converge or diverge with current day challenges to character education?

A Brief History of Character Education

In the early part of the twentieth century, the debate and study of the moral domain included two very influential social scientists, Emile Durkheim (1961) and Jean Piaget (1952). Each scholar presented a different side of this complex issue. For Durkeim, moral education is most effective when children participate in groups, thus forming an attachment to society's rules, norms, and authority. Piaget found Durkheim's approach wanting for two reasons. First, Piaget believed that morality must include judgments about justice and equality, and second, that children must construct individual meaning as they participate in cooperative relationships. A similar debate was summarized by Kohn (1997). On the one hand, there are those who argue that societal values must be inculcated and are proponents of character education as inculcation. On the other side, are those who support ways of thinking and feeling about right and wrong or good and bad. These scholars argue that moral thinking and prosocial skills are gradually learned and developed over time.

In the 1950s, the dominant view of moral development was the socialization view (Rest, 1994). Accordingly, moral development was a matter of learning the norms of one's culture, internalizing them, and conforming to them. If the norms of one's culture say it is morally right to segregate schools by race, then it is morally right to segregate. However, this view of moral development gradually gave way

to an alternative view. Kohlberg (1973) turned the socialization view upside down and claimed that it is the individual, not society, who determines right and wrong. The individual interprets situations, makes moral meaning from social events, and then forms moral justifications and judgments. Kohlberg went on to use longitudinal data to document how persons change in their moral judgment as they age. Although Kohlberg's cognitive-developmental theory dominated research in moral psychology in the 1970s and 1980s, a social-cognitive perspective has emerged more recently with its grounding in social learning theory (Lapsley & Narvaez, 2004). Similarly, research on prosocial development with its focus on empathy, trust, and attachment has attracted considerable interest in the past 20 years. For example, Turiel (1998) has developed ingenious methods of research in social judgments called domain analysis. Domain analysis lends itself to variations in contexts and contents and is less dependent on verbal skills. Domain analysis has been modified for research with very young children, and these researchers have uncovered moral capacities in very young children (Tisak, 1995).

Recently, scholars have wondered about the role of culture in moral and character development. Cultural psychologist Shweder (1991) emphasizes ways local cultural traditions shape us. Cultural psychologists such as Shweder have proposed that moral thinking in various cultures can be analyzed in terms of a person's justifications related to autonomy, justifications related to community, and justifications related to divinity. Endicott, Bock, and Narvaez (2003) have investigated relationships between moral reasoning, intercultural development, and multicultural experiences. What is not clear in Shweder's work, is the relation between cultural ideology and an individual's cognitive construction of an epistemology of morality (Rest et al., 1999).

Where Shweder emphasizes culture, Bandura (1986, 1991) argues that moral thought and moral action are bridged by moral agency, and moral agency is governed by self-regulatory mechanisms. These mechanisms work through three major subsystems. We first monitor our conduct. Then we evaluate our conduct in light of moral standards and make judgments about the morally relevant features of a circumstance. Finally, our monitoring and evaluating is subject to self-reactive influence – will our action be consistent with our personal standards.

Most recently, research has examined moral identity and the moral self. Blasi (2004) is associated with this work and theory. In Lapsley's insightful review of moral psychology (Lapsley, 1996), he summarizes the Moral Self Model, noting it emphasizes responsibility and integrity as key notions underlying moral action. Responsibility entails a "felt obligation" to act according to one's judgment, while integrity is the sense of wholeness that is a consequence of personally-consistent actions (Lapsley, 1996, p. 226). One has a moral identity to the extent that moral notions and commitments, such as being fair or just are judged to be central and essential to one's self-understanding. In the Self Model, presumably, being moral may not be a part of the identity of some individuals. As well, some may build empathy in their self-identity, while others might build fairness.

How is the moral self constructed? Blasi (1984, 2004) proposes that a person first constructs moral structures through social interaction and social role-taking opportunities. These structures then influence the construction of ideals, which gradually

become a part of one's core ideal moral self. It is this ideal moral self that becomes the source of subsequent moral sensitivities, moral judgments, moral motivations, and moral actions (Rest et al., 1999).

This brief but layered history of theories of character and moral learning illustrates the continuous interplay between theories of self, theories of socialization, and theories of culture. Hopefully, you can see that history has repeated itself many times as educators have attempted to understand the fundaments of moral and character education. Let us now embed this theory and research in schools and classrooms.

Responsibilities of Teachers and Educational Communities

It is commonly accepted that teaching has moral dimensions (Goodlad, Soder, & Sirotnik, 1990; Goodman & Lesnick, 2001; Oser, 1992). In fact, some educators argue that schools are morally-saturated institutions (Goodman & Lesnick, 2004; Jackson, Boostrum, & Hansen, 1993). After all, teachers have tremendous influence on the moral development of children. Caregivers entrust their children to teachers and believe that teachers will behave ethically in the classroom. This covenant between caregivers and teachers recognizes the inherent vulnerability of children (Chang, 1994). If a teacher acts unethically, children are the victims. In effect, teaching is a moral enterprise because it is a social enterprise.

When teachers act as moral agents in a pluralistic society, they are embracing the highest and noblest calling of the profession. But what is meant by the notion of teachers as moral agents? And what are some of the responsibilities and moral decisions teachers face during the school day and school year? The moment the children come into the classroom in the morning, moral choices begin. Teachers (a) establish a social relationship with the student/s; (b) allocate resources, especially their own time and professional judgments; (c) manage classroom instruction in ways that support or hinder learners; (d) assign grades and make decisions based on grades that can have long-term consequences for learners; (e) engage students in discussions about curricular or real life problems in ways that model an interest in moral issues and that respect varied perspectives; (f) negotiate or broker educational programs with and between caregivers, teaching colleagues, administrators, and community members; and (g) make decisions about vulnerable young children (Strike & Soltis, 1992).

If we can agree that teaching is moral by nature, then one may ask: What can help teachers make sound decisions and act in ways that help students develop moral selves and prosocial competencies? Although teacher training programs would be helpful, evidence suggest that few teacher training programs prepare teachers to be perceptive regarding moral issues that arise in classroom practice (Chang, 1994). Yet, where deliberative efforts have been integrated into teacher education programs, the results are promising (Johnson & Reiman, 2006; Mentkowski & Associates, 2000; Nucci, Drill, Larson, & Browne, 2005; Oja & Reiman, 2007, Reiman, 2004), suggesting that the socio-moral competence of preservice and inservice teachers can be promoted. These programs will be reviewed later.

Other challenges to moral and character education in the schools exist. Although teachers are central to moral education, the larger school community also is responsible for moral education. Lickona, Schaps, and Lewis (1997–1998) note the school community must embody good character:

It must progress toward becoming a microcosm of the civil, caring, and just society we seek to create as a nation. The school can do this by becoming a moral community that helps students form caring attachments to adults and to each otherThe daily life of classrooms, as well as all other parts of the school environment (e.g., the corridors, cafeteria, playground, and school bus), must be imbued with core values such as concern and respect for others, responsibility, kindness, and fairness. (Lickona, Schaps, & Lewis, 1997–1998, Principle 4)

In light of teacher and community roles in moral education and character education, let's turn to those conditions that appear to be "foundational" to effective prosocial/ moral education and character education programs.

Needed Conditions for Promoting Moral, Prosocial, and Character Education

We now examine empirical evidence related to the broader meaning of moral and character education – to promote prosocial skills and moral understanding rather than inculcation. What are the key conditions that are fundamentally linked to quality moral, prosocial, and character education programs?

Building Relationship – Learning to Trust

Effective prosocial and moral/character education includes efforts to promote "communities of caring" within classrooms and schools (Battistich, Solomon, Watson, & Schaps, 1997). The development of prosocial or moral competence is fundamentally associated with quality interpersonal relationships that students experience in their schools and classrooms. These relationships require teachers to undertake the following:

- Form warm and supportive relationships with and among their students;
- Help students understand the reasons behind classroom rules, procedures, and expectations;
- Teach any relevant prosocial skills the students may be lacking;
- Engage students in collaborative problem solving aimed at stopping misbehavior; and
- Use nonpunitive ways to externally control student behavior when necessary (Watson, 2003).

As you can see, the key to the approach is strong student-teacher relationships. But how does a teacher develop this kind of caring for all students? The Child Development Project found selected teacher strategies and attitudes that contributed to relationship building. Among them were the following: learning to like all students; knowing that all students *want and need to belong*; getting to know the students and their interests and experiences; finding natural ways to get to know the students' caregivers; helping students see that we like them; sharing ourselves; and doing nice things for students (Watson, 2003). Thus, a core requirement of character or moral education is respect and relationship, and teachers need to cultivate skill in building relationships with children.

Complex New Social Role-taking and Helping Experiences

New social role-taking and related prosocial helping experiences are associated with prosocial learning and moral development (Oja & Reiman, 2006). Social role-taking takes two forms – perspective-taking and social role-taking. Perspective-taking includes the affective (e.g., what does the other person think and feel?). Such perspective taking develops with age. A second form of prosocial role-taking is experiential. When students are encouraged to engage in complex new helping roles in schools and classrooms, the experience often leads to growth of moral judgment and prosocial skills in students *and* teachers (Reiman, Sprinthall, & Thies-Sprinthall, 1999; Reiman & Thies-Sprinthall, 1998). An example of a complex new helping role for high school students might include their work as tutors to middle school students. Complex new role-taking also has been studied with teachers engaging in new leadership roles that involve helping peers or mentoring novice colleagues (Reiman & Thies-Sprinthall, 1996).

Guided Reflection and Discourse

Guided reflection includes student self-assessment, guided discourse, and/or reflection activities (e.g., maintaining a journal that identifies significant learning and meaning making) (Leming, 2001; Reiman, 1999; Rest, 1994; Selman, 2003; Sprinthall et al., 1996). Coordinating carefully planned activities, ongoing discourse with students, and, in some cases, dialogic written work that encourages students to self-assess their helping skills, promote prosocial learning and moral development. These assessment and reflection activities are guided by a "more capable other." Thus, for service programs, it would be important to incorporate reflection on the service experiences. Such reflection assists the students in constructing deeper meaning on why service and helping are important and could be core values of a community. Guiding written reflection and oral discourse should be key ethical skills of a practicing teacher. Such skills include listening to students' ideas and emotions, facilitating written reflection on ethical issues, responding in writing to student ideas, and respectfully managing fears and uncertainties shared by students.

Support and Challenge

In a nutshell, this condition means to "start where the learner is and then proceed." Vygotsky's (1978) Zone of Proximal Development helps describe the support

and challenge condition. Support (encouragement) and challenge (prompting the learner to accommodate to new learning) appear to be necessary for quality character education and moral education programs. This may be the most complex pedagogical requirement of quality programs, as it requires teachers to strive to meet students at their current learning level, and then structure experiences and environments that are designed to foster collaboration and new learning. Without question, learning how to manage support and challenge as an educator is the most difficult of the conditions. Beyond the challenge of balancing support and challenge, there is a task of realizing that students differ in their need for support and challenge. Differentiation is required.

Balance Between New Experience and Reflection

Neither the new experience nor reflection alone is enough to promote moral growth. It is important that there is a balance between the new experience (action) and reflection. In a number of the quality programs this means that the practice-based experiences are sequenced with guided inquiry and reflection each week. Too great a time lag between action and reflection appears to halt the growth process.

The condition of balance is linked to recent work in moral schema. Schema is a concept used to account for how we encode and represent social information. According to Taylor and Crocker (1981), schemas have numerous functions: (1) they lend structure to experience; (2) they determine what information will be encoded or retrieved from memory; (3) they affect the speed of problem solving and the processing of information; (4) they support the ability of a person to fill in missing data; (5) they provide the structure for problem solving, evaluation, and goal setting; and (6) they assist a person in developing behavior routines that eventually become automatic. Applying schema to the classroom, when teachers arrange for students to "debrief" discussions or write about their experiences, they are lending structure to the experience and enabling the students to develop routines for evaluating and thinking about the experience. Recently, Rest et al. (1999) have used the term moral schema to describe how persons make moral meaning from experience.

Ethical and Prosocial Skills Coaching

Although this condition has been given somewhat less attention in the literature, it is becoming clear that both teachers and students need to learn skills that facilitate more empathic, more principled, more charitable, and more respectful interactions with others. The importance of coaching new skills is most important in more complex moral education programs that involve professional development. These programs are described later in the chapter (Mentkowski & Associates, 2000; Mosher et al., 1994; Narvaez, Bock, Endicott, & Lies, 2004; Oja & Reiman, 1998, 2007; Sprinthall et al., 1996).

For example, the teacher may need to learn how to utilize a more democratic style of dialogue. The reflective coaching process supports the teacher as she/he attempts new skills and models of teaching. Support through coaching includes ascertaining prior knowledge, clarifying the supporting rationale and evidence for the performance, introducing demonstrations of the performance, providing opportunities for practice with self-assessment, and integrating observation and feedback by a more capable other for assessment of learning performance.

Continuity Over Time

Most successful moral and character education programs occur over a sustained period of time, typically at least a year or longer. Additionally, the aforementioned conditions are present and are applied by educators continuously. For example, if the educator is introducing service learning to high school students, this new role is joined by weekly guided inquiry on the experience. When such inquiry is provided continuously, there are more opportunities for students to construct meaning from the helping experience (Sprinthall et al., 1996).

Having reviewed selected foundational conditions for effective moral and character education programs, I now turn to promising moral and character education models.

Promising Moral and Prosocial Education Models

Although simple moral exhortation, for example, telling students what they ought to do or highlighting virtues such as respect, are ineffective for promoting prosocial dispositions in children or adolescents, some important strides have been made in implementing successful moral education and character education programs.

Table 2 summarizes the programs. In each case, these programs have been carefully studied over a minimum of 20 years. The programs summarized in Table 2 include: Developmental Discipline (K-5), classroom discourse and dilemma discussions

Program	Outcome
Developmental Discipline	Positive change in student prosocial behaviors. Effect sizes average + .44 (Solomon et al., 2001)
Classroom Moral Dilemma Discussion and Discourse	Positive change in moral judgment reasoning. Effects average + .41 (Rest, 1986)
Social Role-taking Programs	Positive change in moral judgment and prosocial behaviors. Effects average + .85 (Sprinthall, 1994)
Just Community and Democratic Schools	Positive change in moral reasoning and school behav- iors. Less absenteeism (Mosher et al., 1994)
Professional Education Programs and Teacher Education Programs	Positive change in moral competence, prosocial behaviors, ethical sensitivity, and principled reasoning. Effects for longitudinal studies average + .72 (McNeel, 1994; Mentkowski & Associates, 2000; Reiman, 2004)

 Table 2
 Research-based programs in moral and prosocial education programs for students and teachers with outcomes

(6–12), social role-taking programs (6–16), Just Community and Democratic Schools Within Schools (9–12); and Professional Education Programs (undergraduate and graduate education). A brief description of these programs follows.

The five programs summarized in Table 2 have been studied over a minimum of 20 years. Effect sizes are reported for most of the programs and range from +.41 to +.85. The programs have been shown to have moderate-to-large effect sizes. This means that the moral education and character education programs are moderately-to-strongly predictive of what educators might hope to accomplish by using the practice. Each program is briefly summarized.

Developmental Discipline

The Developmental Discipline program is moderately predictive of positive gains in students' prosocial behaviors. This is significant. After all, most elementary school teachers encounter students who are perceived as troublemakers in the classroom. Their reputation follows them from one grade to the next. Although many teachers may express care for their students, it can be a challenge to form caring relationships with students who are difficult. The Developmental Discipline program offers hope for teachers. It is a research-based framework that helps teachers believe that even their most disruptive students want to be liked and respected. In contrast to coercion, the program encourages teachers and students to learn to trust, and it is based on attachment theory and the findings that children's capacities for empathy and cooperation - a developmental process - emerges from the child's secure attachment relationship (Stayton, Hogan, & Ainsworth, 1971). Watson (2003) notes that systems of reward and punishment offer only temporary control of students. Further, systems of reward and punishment do not lead to positive changes in students' prosocial and moral development. Instead, Watson and her colleagues find that what insecurely attached children need, above all, is the experience of a secure and nurturing relationship with an adult caregiver. "Once we understand that even resistant and chronically misbehaving children are by nature motivated to learn and to want a close relationship with us, it is easier to be more sympathetic to them, even while their troublesome behavior is difficult to manage. Attachment theory gives us reason to hold out for positive relationships with all of our children" (Watson, p. 284).

Classroom Discourse and Dilemma Discussions

By far, the most common strategy for promoting student perspective taking and moral reasoning at both the junior and senior high school levels is to present a sequence of open-ended moral dilemmas for discussion and analysis (Berkowitz & Oser, 1985; Oser, 1992). The teacher's role is critical to the success of this approach. The teacher encourages students to verbalize their justifications for their choice. In the beginning of the discussion, it is particularly important for the teacher not to intervene, take over, or dominate the discussion by lecturing, directing, or admonishing students for a particular perspective. In effect, the students need time, feelings of trust, and

encouragement as they explore their views related to the dilemma. There are a set of helpful instructional strategies that can be employed in the classroom discourse and dilemma discussion method. One strategy is active listening. This strategy requires the teacher to paraphrase the main idea shared by the student. Paraphrasing acknowledges the student's idea and can create a supportive atmosphere for other students to speak up. A second instructional strategy is the use of clarifying questions. Clarifying questions encourage the student or students to elaborate on their ideas. A third strategy is the use of role-reversal. It works by asking a student who takes one position to discuss the question from another student's viewpoint. Finally, the teacher may need to challenge statements in order to encourage students to reason at more complex levels (Berkowitz, 1984). The discourse approach can be a valuable contribution to the normative side of teaching, and it can be a central element of a moral or character education program.

How might the inquiry and discourse approach be integrated into a science course? To adequately integrate such an approach into a science course, there would be a need to examine the moral dimensions of science and technology, foster a student discussion about ethics in the curriculum, and encourage students to act responsibly in the realm of science and technology (Berkowitz & Simmons, 2003). One can imagine a conversation about genetic engineering. Such a conversation would encourage multiple viewpoints in a turn-taking and consensus building collaborative process.

Social Role-Taking Programs

A third method involves a series of educational conditions and has been implemented in junior and senior high school levels as well as college levels. In social role-taking programs, adolescents, for example, would participate in a significant new service or helping role such as peer counselor or cross-age tutor with a younger child. There is a genuine participatory role, not role-playing, in which the student actually takes on a responsibility of helping a peer or younger child. Such programs also provide skill building activities as the adolescents engage in the helping experience.

In one program (Sprinthall & Scott, 1989), the goal was to involve high school females as math tutors for elementary age females. There has been a great deal of concern about female's fear of success in mathematics so the choice of participants was intentional. The teenage females met each week as a group to build skills in tutoring methods which included the heavy use of manipulatives with elementary students. The teenagers discussed their feelings and thoughts during the weekly meetings and analyzed their tutoring skills. Tutoring sessions lasted only about 40 minutes per week. For the elementary females, the tutored group improved in both skills and attitudes. They raised their national score on the California Achievement Tests from the fiftieth to the sixty-first percentile, while a control group improved only four points. The senior high females involved in the helping also benefited. The tutors improved on measures of moral reasoning and conceptual/epistemic complexity.

Just Community and Democratic School Models

Although it has long been a goal of education in many countries to develop citizens with the competencies and skills to translate democratic ideals into effective social and political action, this goal has remained largely elusive. Students might be introduced to information about governmental structures and civic practices in high school social sciences where they are required to memorize and recall the information. However, too often, they lack the opportunity to apply these principles through practice and participation.

The Just Community or Democratic Schools Model is by far the most comprehensive (and the most complex) to implement. Whereas developmental discipline, classroom discourse, and the social role-taking methods generally involve classroom-size programs or departmental efforts, the Just Community and the Democratic School method involves a school-within-a school of some 200–300 students and 6–12 teachers. The idea began with Larry Kohlberg and his colleague Ralph Mosher and was tried out in a number of high school settings (inner-city, urban, and suburban).

The central idea of the Just Community and Democratic School model is that teachers and students become a single community that coordinates and facilitates school governance including school rules and policies. The academic program continues to provide instruction, however there is a greater emphasis on interaction and dialogue. A number of studies have focused on formal measures including academic advancement, moral judgment, and prosocial behaviors. Compared to students in conventional schools, the differences favor the democratic schools with students exhibiting more complex moral judgments, more prosocial behaviors including more acknowledgement of majority and minority points of views, and noticeable changes in behavior including fights (reduced), stealing (ceased), attendance (increased) (Power, 1988). Mosher et al. (1994) provide the most complete description of findings related to moral judgment, moral atmosphere, and moral behavior in a democratic schools model. In fact, their work also researched the effects according to racial/ ethnic and class differences. They report that within one-to-two semesters the Democratic School brought these diverse groups together. This is a striking outcome given the famous cliquishness of teenagers (Mosher, Kenny, & Garrod, p. 129).

Professional Education and Development Programs

A number of studies have examined how professional education programs foster moral sensitivity, moral reasoning, and moral character. These studies contrast beginning students in multiyear professional education programs with graduating students from the same program (McNeel, 1994). The studies find that professional education correlates with moral judgment development and this effect is one of the largest of any effects of college (see Pascarella & Terenzini, 1991). Research (Rest, 1994) suggests that formal college education has a pronounced effect upon moral judgment due to the intellectual stimulation such as questioning, classroom discourse, inquiry, and interest in justifications based upon evidence and argument. However, when selected higher education institutions have resorted to dogmatism and indoctrination, moral judgment is inhibited (McNeel, 1994). Additionally, it was found that college programs that focus too exclusively on careerism and technicalities of initial job preparation inhibit growth in moral judgment. An excellent review of deliberate efforts to promote moral competence (e.g., ethical sensitivity, ethical judgment, ethical motivation, and ethical character) can be found in Rest and Narvaez (1994).

Summary and Conclusions

In this chapter, character education was broadly defined as encompassing all aspects of schooling that impact upon the development of prosocial and moral competencies of students, including the capacity to reason about moral and ethical issues. Democratic education refers to those deliberate school-based initiatives that are designed to promote the development of students into competent, responsible citizens in a democratic society.

The chapter revisits research on conditions that promote moral reasoning and prosocial skills. The chapter examined a number of questions related to character education. For example, what have been some of the challenges for character education? What can we learn from the historical record of moral theory? What are the perceived professional responsibilities of teachers and educational communities related to moral education and character education? What conditions contribute to quality character education have moderate-to-strong research effect sizes, suggesting that they really do make a difference for K-20 students? Finally, can we be aspirational, envisioning what it means to be fully human as we forge learners' moral selves?

In light of these questions, the chapter reviewed some of the historical and empirical challenges for character education. A broader definition of character education was employed in which students need to construct their prosocial character which includes caring about, and acting on core ethical principles such as fairness, responsibility, and respect for self and others. Acknowledging an expanding evidence-base for moral, prosocial, and character education programs, the chapter reviewed scientifically-promising approaches to promoting students moral learning, prosocial skills, and character in school settings.

Engaging education in the moral and prosocial domains is important if we can avoid the temptation to inculcate narrowly defined virtues. Evidence suggests that constructivist approaches, as summarized in the chapter, are quite promising if we want children and adolescents in our society to be guided in the process of becoming less aggressive, more empathic, more principled, more respectful of diverse cultures and diverse ideas, more charitable, and more engaged in democratic citizenship.

Implications for Teachers: Forging Students' Moral Identity

Students cannot become morally sensitive unless their teachers are committed, engaged, and moral. Engaged means that teachers care about their students and the world, and they are eager to infuse the moral dimension into as many aspects of the

curriculum as are feasible. The students' moral identity (Blasi, 1984, 2004; Lapsley, 1996) is more than an accretion of disciplined habits, one layer after another added together until the child automatically behaves responsibly in school. Nor is it merely the nurturing of compassion or student reflection about everyday problems and ambiguities. Instead, it is a way-of-being-in-the-world rather than just a response-to-the-world. Students (or teachers) moral identity shares features with our other identities, for example, that of caregiver. It implies that we are preoccupied by this identity, we monitor our adequacy, and we resist challenges to this identity (Blasi & Milton, 1991). Someone with a strong moral identity has a felt sense of responsibility for expressing moral statements and actions, and sees moral implications in seemingly neutral situations. Additionally, such a person would question the adequacy of his or her responses, and tend to resist invitations to be amoral or immoral. Growing a child's or adolescent's moral identity, like growing skills and subject matter understanding, requires gently drawing children's, adolescents', or young adults' attention to moral issues as they come up in the existing curriculum, or by providing opportunities for students to engage in authentic and complex new social helping roles. In either case, the teacher serves as a guide. Robert Coles (1997) emphasizes the centrality of a teacher's classroom actions if she or he is interested in forging students' moral identity:

We grow morally as a consequence of learning how to be with others, how to behave in the world, a learning prompted by taking to heart what we have seen and heard. The child is a witness; the child is an ever-attentive witness of grown-up morality – or lack thereof; the child looks for cues as to how one ought to behave, and finds them galore as we parents and teachers go about our lives, making choices, addressing people, showing in action our rock-bottom assumptions, desires, and values, and thereby telling those young observers much more than we may realize. (Coles, 1997, p. 5)

Biographical Note

Alan J. Reiman is Associate Professor in the Department of Curriculum and Instruction and Research Director of the SUCCEED Program at North Carolina State University where he directs the MEd and PhD programs in Curriculum Development and Supervision. His research interest includes new teacher support, teachers' moral and reflective dispositions, and deliberate approaches to promoting teachers' moral and conceptual reasoning. Dr. Reiman has written over 50 articles and chapters on moral development, teacher professional development, teacher education, and new teacher support. Additionally, he has co-authored chapters in the *Second Handbook of Research on Teacher Education* and in the *Handbook of Research on School Supervision*, and he has co-authored or edited three books including *Mentoring and Supervision for Teacher Development*. Dr. Reiman is past Chair of the Moral Development and Education SIG for the American Educational Research Association. Currently, he is serving as principal investigator for a review of North Carolina's new teacher support initiatives.

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TEACHING A SECOND LANGUAGE

Sharon H. Ulanoff

What is language? Although many suggest that it is difficult to put together a fixed definition of language, as early as 1921 experts described language as a way for humans to communicate using arbitrary symbols (Hall, 1964; Sapir, 1921; Trager, 1949). Chomsky (1968) argues that language involves the construction of sentences from a fixed set of elements and Halliday (1975) describes language as varied behavior options taking place in a social context and linked to culture. Most experts agree that language in not necessarily instinctual, rather it is passed down from parent to child from birth, with most children succeeding in acquiring their native language.

Moreover, language is not uniform, rather it varies according to sociocultural characteristics of groups, e.g., cultural background, geographic location, social class, gender, age, and the influence of the speech community. There are also differences in the way language is used in specific situations, such as home, school, formal and informal settings (Heath, 1983). Language varieties, including dialects, pigeons and creoles, are regional or social variations of language (Hamers & Blanc, 2000, p. 370).

Dialects are those language varieties that are used by specific groups of people (Lessow-Hurley, 2005, p. 36). Dialects can vary geographically, yet are often understood by speakers of the same language (Ardila, 2005, p. 66). Pigeons emerge through contact between two language groups that develop an approximation of a communal language based on a need for restricted communication without the intent of developing bilingualism (Hamers & Blanc, 2000, p. 303). When a new generation grows up speaking that language such that it becomes the native language of a specific community, that language is called a creole (Hamers & Blanc, 2000, p. 305). Though it is generally recognized that language varieties are not deficits, a recurring theme in the research addresses the impact of speaking a nonstandard language variety on educational experiences, based on the notion that language varieties are deficient in and of themselves and should be eradicated (Ovando, Combs, & Collier, 2006).

First Language (L1) Acquisition Theory and Practice

But how do children acquire their first language? Children usually go through a series of stages as they acquire their L1, generally progressing from babbling to one

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching*, 1033–1048. © Springer Science+Business Media LLC 2009 and two words to telegraphic speech, which includes only content words, and on to developmental stages that begin to approximate more standard, recognized forms of language (Lessow-Hurley, 2005). Such acquisition is seen as a normal process, which most children master even if they progress differently through the stages (Cook et al., 1979). Cook et al. (1979) argue that such language, acquired and used by children, can be considered to have its own language system, rather than as a part of adult language.

There are a variety of theories that attempt to explain L1 acquisition and development. These include the behaviorist theory (Skinner, 1957), the innatist theory (Chomsky, 1957) and the interactionist theory (Halliday, 1975). The behaviorist theory relies on the concepts of imitation and reinforcement to describe how children acquire or learn language, defined as "a set of associations between meaning and word, word and phoneme, and statement and response," which is learned within the framework of stimulus-response (Owens, 1992, p. 29). This theory has been widely criticized because it does not account for the fact that children often speak sentences and approximations of correct speech that they have not yet heard (Peregoy & Boyle, 2005).

The innatist theory argues that language development is innate and that children have a biological "language acquisition device" or LAD that "prewires" them to acquire language and construct comprehensible utterances they have never heard (Chomsky, 1968). Chomsky further suggests that while individual languages are different in terms of such things as vocabulary and syntax, there is a "… universal grammar or set of principles that determines the grammars the mind may construct" (Crawford, 2004, p. 186). This theory, however, discounts the role of social context in terms of language acquisition and presupposes that child language will consistently reflect adult language (Owens, 1992), something that is not always true.

The interactionist theory acknowledges the role of social context in addition to some form of innate capacity for language acquisition. According to this theory, caregivers of young children play an important role in language acquisition as they scaffold language through modeling during communication (Halliday, 1975). However, Chomsky (1999) reminds us that even young children talk in ways that are both novel and conventional as the rules that govern language are modeled in ways that facilitate language acquisition.

Second Language (L2) Acquisition Theory and Practice

A second language is one that is acquired after the first language. While L2 acquisition is not an exact reproduction of L1 acquisition (Edwards, 2004), first and second language acquisition do share some of the same qualities and processes. Krashen and Terrell (1983) suggest that there are four specific stages for L2 acquisition: *preproduction*, characterized by limited comprehension and little, if any, verbal production; *early production*, where children still have limited comprehension but begin to give one or two word responses to questions; *speech emergence*, where children demonstrate increased comprehension and verbal output consists of simple sentences; and *intermediate fluency*, characterized by good comprehension and complex sentences with few errors. Second language learners generally use what they know about their L1 to help them learn their L2, often imposing L1 syntax on the L2, especially as they begin to control the L2. It is important to remember that while most children are successful in acquiring their L1, it is not always the case with the L2. Because learners do not generally acquire both their first and second languages within indistinguishable contexts, nor have opportunities to use both languages in identical ways, L2 learners often demonstrate differences in proficiency between the first and second languages (Valdés, 2005, p. 414).

Second language acquisition theories mirror L1 acquisition theories. The behaviorist theories (Skinner, 1957) are based on imitation and repetition and often categorized by dialogue memorization and pattern drills (Peregoy & Boyle, 2005). The innatist perspectives also inform L2 acquisition theories and include the creative construction theory (Dulay, Burt, & Krashen, 1982), which suggests that as children acquire the L2 they creatively construct L2 rules and errors similar to the ways they are constructed in L1 acquisition (Peregoy & Boyle, 2005). The evidence also suggests that input from both the L1 and L2 is manifested in L2 output once the concepts are understood (Bhatia & Ritchie, 1999; Chomsky, 1988; Cummins, 1994).

Within the innatist perspective Krashen (2005, 1994) describes five hypotheses that help us to understand how children acquire the L2. The learning-acquisition hypothesis, argues that while acquisition occurs during meaningful interactions between L1 and L2 speakers, learning is the formal, conscious study of language. The monitor hypothesis suggests that language learners have an internal editor that monitors language output (Krashen, 2005, 1994). The natural order hypothesis states that language learners acquire language rules in a predictable order. The input hypothesis asserts that learner's level of L2 proficiency, what Krashen (2005, 1994) calls comprehensible input or i + 1, facilitated by the use of context and background knowledge. And finally, the affective filter hypothesis (Krashen, 2005, 1994) states that L2 acquisition is most likely to occur in a learning environment with low-anxiety, when students are motivated to learn and have positive self-esteem.

The interactionist view of L2 acquisition suggests that it is the interactions between native and non-native speakers of a language that promote language acquisition (Peregoy & Boyle, 2005). This perspective also takes into account the nature of the acquirer's language output as a factor in success in L2 acquisition and acknowledges the role of interaction in the negotiation of meaning between native and non-native speakers in the acquisition process. When viewed within a sociocultural framework, the interactionist perspective looks at L2 acquisition as the co-construction of meaning between L2 learners and more expert others who scaffold them through the acquisition process (Vygotsky, 1978).

The Relationship Between L1 and L2 Acquisition

Cummins' (1994) describes two interrelated dimensions of language proficiency that serve as a continuum for language acquisition: BICS (basic interpersonal communication skills) or communicative language and CALP (cognitive *academic language* proficiency) or the language necessary to be successful in school, both of which have

implications for language teaching and acquisition. As children come to understand and use language they develop BICS for communication, which then helps them to develop the academic language proficiency or CALP that is necessary for higherlevel thinking and academic success.

While there are arguments against the notion of two types of language proficiency (MacSwan, Rolstad, & Glass, 2002; Wiley, 1996), Cummins (2005, n.d.) continues to make the case that there is a difference between communicative language and CALP, arguing that while most children acquire communicative language by the age of 5 or 6, that language continues to grow in terms of vocabulary development and language usage within specific linguistic contexts. Since Cummins (1994) argues that it can take *up to* 7 years for CALP to develop, more fully developed L1 CALP is the faster path to L2 CALP development. Therefore when children can fully use CALP in their L1, that CALP will support the development of both communicative and academic language in the L2. When considering literacy development in addition to language acquisition it is important to think about the discrete language skills taught in school, (Cummins, 2005, 2003) as well as how much academic language and literacy students have in their L1 (Short & Fitzsimmons, 2007).

Furthermore, much that one knows about his/her L1 *transfers* to the L2 once L2 proficiency is fully developed (Thonis, 2005). That there is a common underlying proficiency (Cummins, 2005, 1994, 1981) between L1 and L2 supports the notion that what one person learns in his/her L1 adds to the general knowledge base that will be available to him/her in the L2 when s/he has enough proficiency in that language (Herrera & Murry, 2005). Transfer occurs when there is similarity between learnings (Thonis, 2005). While most people learning a second language use *forward transfer* from the L1 to the L2, there is evidence that *backward transfer* from L2 to the L1 also occurs (Hamers & Blanc, 2000).

Second Language Pedagogy and Practice

While there are a variety of specific methodologies for teaching a second language, there are generally three major types of approaches to L2 pedagogy: grammar-based, cognitive and communicative approaches (Herrera & Murry, 2005). Grammar-based approaches are based on the assumption that the best way to learn/acquire language is through the memorization of rules and sentence patterns. Students learn rules sequentially and some methods in this approach use little or no L1 to support L2 acquisition/learning. Grammar-based approaches include:

- *The grammar-translation method*, which historically has been used to teach Greek and Latin, uses the L1 for the language of instruction and focuses on translating difficult texts into the L2 (Mora, 2006). There is little emphasis on oral language development and a focus on reading, writing and grammar (Herrera & Murry, 2005).
- *The audiolingual method,* which was developed during World War II to quickly teach US army personnel foreign languages (Celce-Murcia, 1991), consists of dialogue memorization and practice, repetitive pattern drills and conversation.

Rules are learned sequentially and teachers engage in error-correction, with little use of the L1.

• *The direct approach* uses dialogues in the L2 that are initially presented orally. Grammar is taught inductively and generally teaching is done through questions and answers without translation. The use of the L1 in class is prohibited as there is a focus on total immersion in the L2 (Herrera & Murry, 2005).

Cognitive approaches to L2 acquisition focus on the explicit teaching of learning strategies within a communicative context. The most widely recognized cognitive approach is the *Cognitive Academic Language Learning Approach (CALLA)*, an approach that helps students to transition from bilingual to L2 language classrooms. CALLA (Chamot & O'Malley, 1994), which focuses on integrated language and content instruction, is generally designed for those students with intermediate levels of L2 language proficiency. CALLA uses developmentally appropriate language instruction with a focus on developing CALP in both L1 and L2 within the context of content-based instruction (Herrera & Murry, 2005, p. 175). CALLA attempts to bridge the cognitive and communicative approaches.

There are a variety of different methods used to teach language that fall under the umbrella of communicative approaches to L2 acquisition. Communicative approaches emerged in the 1960s as a result of the changing research perspective on L1 and L2 acquisition and focus on communication (Crawford, 2005, Herrera & Murry, 2005, p. 180). In these approaches, teachers often use collaborative learning activities in order to promote peer interaction. Communicative approaches include:

- *The natural approach* (Krashen & Terrell, 1983), a communicative approach that focuses on providing comprehensible input, communicating messages, and creating low affective filter situations to promote language acquisition (Lessow-Hurley, 2005). Natural approach instruction is organized according to language proficiency levels: preproduction, early production, speech emergence, and intermediate fluency and posits that language acquirers go through a silent period when they first begin to acquire the language.
- Specially designed academic instruction in English (SDAIE), used in the United States and often referred to as sheltered English, helps intermediate L2 learners develop their English language skills within the framework of content instruction. SDAIE is often used when there is limited bilingual staff to support learners or when there are a variety of native languages present in the classroom, such that bilingual instruction would not be appropriate (Lessow-Hurley, 2005; Peregoy & Boyle, 2005).
- *Content-based language instruction (CBI)*, much like CALLA and SDAIE, integrates language and content instruction through the stages of language proficiency. CBI views the content as merely the vehicle for the language instruction (Brinton, Snow, & Wesche, 1989).

It is also important to consider two teaching methodologies that use both the L1 and the L2: concurrent translation and the preview-review method. *Concurrent translation* can be defined as the use of two languages interchangeably or concurrently during lessons, with care taken to avoid the use of direct translation from one

language to the other (Jacobson, 1981). Concurrent translation can actually interfere with L2 acquisition because students often tune out the L2 and wait for content in the L1 (Ulanoff & Pucci, 1999).

The preview—review method uses the L1 to assist in building background knowledge to activate already established schemata during whole class or small group instruction. For preview—review, the class is separated into language dominant groupings for an L1 preview of the content to build background knowledge. The lesson is then taught in the L2 followed by an L1 review that expands and reinforces the content of the lesson. This method has demonstrated success in L2 vocabulary acquisition (Ulanoff & Pucci, 1999).

What It Means to be Bilingual

The Merriam-Webster Online Dictionary (http://www.m-w.com/dictionary) defines bilingualism as the ability to speak two languages, the frequent use of two languages and the political or institutional recognition of two languages (Merriam-Webster-Incorporated, 2006). Historically, there have been varied definitions, including "native-like control of two languages" (Bloomfield, 1933), the use of both languages (Weinrich, 1974) and the notion of bilingualism as a continuum between such control and the ability speak in the L2 (Haugen, 1973). Valdés and Figueroa (1994) support a broader definition of bilingualism in which "... an individual possesses more than one language competence" and can function in both languages on some level (p. 8). It is important to note that worldwide, monolingualism is the exception, rather than the rule (McKay, 2005; Valdés, 2006).

More recently, Butler and Hakuta (2004) define bilinguals as "... individuals or groups of people who obtain communicative skills, with various degrees of proficiency, in oral and/or written forms, in order to interact with speakers of one or more languages in a given society" (p. 115). This definition focuses on communication rather than the degree of skills related to learning the formal rules of any language. Within definitions of bilingualism there are different types, including:

- *Simultaneous bilingualism*, where both languages are acquired at the same time before the age of three (McLaughlin, 1978). Simultaneous bilingual can also be considered multiple L1 acquisition (Meisel, 2004, p. 95).
- Sequential bilingualism, where L1 is first acquired in early childhood and then L2, generally after the age of three (McLaughlin, 1978). Sequential bilingualism is sometimes called consecutive bilingualism.
- *Elective bilingualism,* an additive process where acquirers choose to learn a L2 and take steps to do so (Valdés & Figueroa, 1994).
- *Circumstantial bilingualism*. Circumstantial bilinguals acquire the L2 in order to be able to communicate within a specific language community, often as a result of immigration. There can be generational differences among circumstantial bilinguals with L1 loss evident as early as the second generation (Portes & Hao, 1998; Valdés & Figueroa, 1994).

- *Balanced bilingualism,* where there is equal proficiency and functionality in both languages (Butler & Hakuta, 2004).
- Dominant Bilingualism, where there is demonstrated superior proficiency and usage in one language (Lambert, 1955; Wei, 2000).
- *Compound Bilingualism,* where individuals "... attribute identical meaning to corresponding words and expressions ..." in both languages (Macnamara, 1967, p. 64) using different labels to identify the same concept. Compound bilingualism generally occurs when both languages are acquired in the same context and timeframe (Hamers & Blanc, 2000).
- Coordinate Bilingualism. Coordinate bilinguals attribute somewhat different conceptual understandings of corresponding word meanings in each of two languages (Williamson, 1991). Coordinate bilinguals generally acquire languages in distinctly different contexts (Heredia & Brown, 2004; Wei, 2000).

Research suggests there may be cognitive benefits or consequences for bilingualism, depending on the level of language proficiency in each or both of the two languages that the bilingual individual speaks (Bialystok, 2007). The threshold hypothesis (Cummins, 1994, 1981) posits that those who are proficient bilinguals, with high levels of language proficiency in both the L1 and L2, will have positive cognitive effects, while those with limited bilingualism as a result of not fully developing CALP in either language can have negative cognitive effects (Cummins, 1981, p. 39). However, the notion of limited bilingualism or *semilingualism* has been criticized as an extension of the perception that there is a "complete" level of proficiency, ignoring the dynamic nature of language and language communities (Romaine, 2004).

The degree of proficiency in each of the two languages that bilinguals use can be affected by both external and internal functions (Mackey, 2000). External functions include such things as the language(s) spoken in the home, community languages, including the languages spoken in the neighborhood as well as those used for specific group membership, e.g., church, school, or occupation (Mackey, 2000, pp. 29–31). Internal functions consist of specific language uses, the language users aptitude, intelligence, memory and attitude as well as the age when the person becomes bilingual (Mackey, 2000, pp. 36–39), specifically in the case of sequential bilinguals.

Of interest, then, is the role of age and maturation in bilinguals and the question of whether or not individuals can acquire languages indefinitely. Although some researchers argue that there is a critical period for language learning (Hyltenstam & Abrahamsson, 2003), there is some evidence indicating that while younger learners generally become more fully proficient in both languages (Hamers & Blanc, 2000), older learners, both adults and children, move through the earlier stages faster because they are more adept at learning in general (Krashen, 1994). Interestingly, despite a general consensus that there are some age-related consequences for language acquisition, there is no agreement as to the exact age that limits L2 acquisition (Hakuta, Bialystok, & Wiley, 2003). Furthermore, Hakuta et al. (2003) suggest that rather than age there may be other factors, such as educational attainment and socioeconomic status, that cause decline in L2 language acquisition as those acquiring an L2 age.

Aspects of Bilingualism and Bilingual Education in Global Contexts: Language Contact, Dominance, Disglossia, Mixing, and Loss

Within global contexts speakers of different languages often come in contact with one another as a result of immigration, emigration, and political changes within and without specific countries. Individual languages are closely related to group identity and norms and, depending on the specific situation can either "... converge or diverge, or converge and diverge at one and the same time" (Hamers & Blanc, 2000, p. 307). Societal norms and economic constraints are also important influences on language choice within and without bilingual communities (Romaine, 2004) and are often impacted by language dominance. For example, some countries establish official (or unofficial) language policies that require a particular language to be used for economic, religious or political reasons (Li & Lee, 2004). Others, such as India, with over 200 mother tongues, two national languages and a series of "scheduled" languages pertaining to their respective states, support an educational stance that moves more toward language maintenance with respect to certain languages (Bhatia & Ritchie, 2004).

Disglossia, sometimes called restricted language use, occurs when two languages have distinct functions in which the bilingual person has little or no choice over which language to use in specific situations (Grosjean, 1982, p. 130). For example, there may be religious reasons to choose to use a specific language, e.g., Jewish children in the US study Hebrew (Romaine, 2004, p. 393). Furthermore, disglossia often occurs in bilingual communities where one language is used for communication and interaction within the community, but another is necessary for interaction outside the community (Romaine, 2004, p. 395). Language usage in this case is often related to the status of the language – language used for so-called higher functions, e.g., government, media, education, is considered the *high* language (Hamers & Blanc, 2000; Romaine, 2004).

Another factor that should be considered is the phenomenon of language mixing, including *language borrowing* and *codeswitching*. Language borrowing, which results from cultural contact between two language communities (Kemmer, 2007), occurs when words from one language are used morphologically and syntactically as though they belong in another language (Poplack, 2000, p. 221). For example, the word *garage* is used in English without regard for its French origins (Kemmer, 2007). The borrowed words are thus used by a different speech community as part of the general language repertoire (Kemmer, 2007). Codeswitching is "... the alternate use of two languages, which can occur at the word, phrase, clause, or sentence level (Ovando & Collier, 1985, p. 86)." Codeswitching is not the same as language borrowing, but instead is a sophisticated linguistic phenomenon with its own series of sociolinguistic rules that are generally used by proficient speakers of both languages (Jacobson, 1981). Ovando and Collier (1985) further contend that codeswitching represents "... a clean break between the two phonemic and morphologic systems (p. 86)." Language choice may be a political statement during codeswitching (Heller, 1992) or a discourse strategy used for effect during conversation (Poplack, 2000), but codeswitching is often used as a means of effective communication between parents, children and teachers (Huerta-Macías & Quintero, 1992).

Lastly, the literature on *language shift and language loss* is intricately related to the sociopolitical contexts of language use. Languages often shift or are lost gradually as their speakers are assimilated into new or different cultures that require the use of a new or different language (Crawford, 1996). Language loss is linked to demographic factors, economic forces, social identifiers and the influence of the media (Fishman, 1991) and can be considered as part of the loss of diversity in general, such that global politically dominant languages essentially overpower indigenous local languages until they are essentially replaced (Hale, 1992, p. 1) or die (Williamson, 1991). Krauss (1992) worries that those languages that are still spoken but no longer learned as mother tongues by children will soon become extinct (p. 4). Given that "historically, schools have been the primary vehicle for the assimilation of peoples of various backgrounds and for the promotion of mainstream cultural and linguistic norms and values" (Macgregor-Mendoza, 2000, p. 334), bilingual education programs may be one way to promote language maintenance instead of language loss (Watahomigie & Yamamoto, 1992).

The State of Bilingual Education and Language Learning in the Twenty-First Century

Definitions and Programs

There are a variety of definitions of bilingual education (BE), most of them based on programmatic decisions and practices, but it is generally accepted in the literature that BE exists when instruction takes place or is provided through the media of two or more languages (Genesee, 2004; Hamers & Blanc, 2000). Bilingual education can be thought of as an instructional approach (Ovando et al., 2006) and the term generally encompasses a variety of program models, some of which promote biliteracy development and use both languages, while others use the student's L1 for support while s/he is acquiring the L2.

BE programs generally follow one of several models, including those with simultaneous instruction in both (or all languages), those where the student is instructed first in the L1 and later on in the L2 when s/he is ready to learn in the L2, and those where the student is first instructed in the L2 and later introduced to the L1 for instruction (Hamers & Blanc, 2000, p. 322). They vary in the language of instruction, the amount of time spent in each language and specific instructional methodologies used. Most BE programs include L1 development, L2 acquisition, and content area instruction in both the L1 and L2. Effective programs can also include L1 literacy development, substantial peer interaction to support language acquisition and offer access to quality teaching materials and highly qualified bilingual teachers with knowledge of bilingual and L2 methodologies (Linquanti, 1999). BE program models include:

- *Transitional bilingual programs* (TBE) or early-exit programs (Ovando et al., 2006) are those in which students begin instruction in the L1 and then transition to instruction in the L2 when they are literate in L1 and proficient in L2. While TBE programs are generally thought of as subtractive programs (Thomas & Collier, 1997), there is evidence that they can be effective (Krashen & Biber, 1988).
- *Maintenance bilingual programs* (MBE), also known as late-exit or developmental programs (Ovando et al., 2006), are generally considered to be additive programs where the goal is fluent proficiency in both (or all) languages as well as biliteracy/ multiliteracy. In MBE students receive content instruction in both languages as long as is possible within the school system (Ovando et al., 2006, p. 41).
- *Immersion programs* were first documented in Quebec, Canada during the 1960s in classrooms where the majority children learned through both French and English. In this BE model all instruction is conducted in the L2 with homogeneous groups of children who do not speak that language (Hamers & Blanc, 2000; Ovando et al., 2006) in order to promote L2 proficiency and L1 maintenance (Crawford, 2004). Program characteristics include language dominant groupings, the use of the minority language for instruction, and the provision of L1 language arts instruction after a period of complete L2 immersion (Krashen, 1994).
- *Partial immersion programs* are designed to use 50% of instructional time in the L2 and can vary for specific instructional purposes. For example, in Australia there are early partial immersion programs for primary school children and late partial immersion programs for secondary students, to either help students maintain a first language other than English or to teach English speaking children another language (de Courcy, 2005, 2002). Furthermore, there are Australian BE programs for both indigenous and immigrant populations (Brisk, 2005).
- *Two-way or dual immersion bilingual education programs* emerged in the United States in order to develop bilingualism for both the majority and minority language speakers. In these programs monolingual English speakers are immersed in a second language (that of the L2 learners) along with L2 learners who are learning English (Lessow-Hurley, 2005). Successful programs last a minimum of 6 years, have a balanced ratio of L2 learners to native English speakers in each class, maintain separation of languages, emphasize the minority language in the primary grades, have effective content-based instruction and active parent involvement (Thomas & Collier, 1997).
- *Content and language integrated learning* or CLIL, found throughout the United Kingdom and Europe, focuses on teaching language through the content areas (Leung, 2005), using at least two languages to teach curricular content: the language used in mainstream education, and a target language, either a foreign, regional, minority or other language (Eurydice, 2005, p. 61). CLIL instruction can vary from limited use of the L2 to full immersion and also from primary to secondary schools (Marsh & Marsland, 1999).
- *English as a second language* (ESL)/English language development (ELD) *programs.* These US programs are generally pullout programs where L2 learners

are taken out of class for instruction specifically designed to teach English. They generally use English language development (ELD) instruction at the beginning levels and SDAIE at the intermediate levels. The goal of ESL/ELD programs is fluency in English.

The Social, Political, Historical and Linguistic Contexts of Bilingual Education

When looking at BE from a global perspective it is important to situate its study within the social, political and linguistic contexts that exist in both historical and current frameworks. Leung (2005) suggests that BE serves the following purposes within a linguistically diverse society: the promotion of either the majority or minority or both the majority and minority languages, the revitalization of a minority language or the promotion of a foreign language within a specific language learning environment (p. 239).

Moreover, specific world developments can greatly impact both the need and the rejection of BE programs. These developments might include such things as former colonies becoming independent, the need to use a "language of wider communication" as a result of economic demands, and internal and external migration patterns, including the importation and exportation of workers to meet labor demands (Hamers & Blanc, 2000).

The language of instruction thus becomes a critical issue in terms of determining the nature of BE. UNESCO (1953) argued for the right for all children to be educated in the mother tongue, a notion that has generally received worldwide support. In the United States, this is evident in the legislation of the 1960s and 1970s that led to the development of BE programs aimed at providing L2 learners with equal access to a quality education and ameliorating environmental factors linked to failure in school (Wiese & García, 1998, pp. 3–5).

The systematic dismantling of these US programs in the late twentieth and early twenty-first centuries is symptomatic of the current socio-political context of the United States, which led to programmatic efforts to replace a child's L1 with the dominant language, English, so that s/he would not suffer inequality (Tollefson, 1991). Since the end of the twentieth century several states, including California and Arizona, have passed legislation institutionalizing English-only instruction with minimal L1 support for all students regardless of linguistic background.

Thus BE programs throughout the world are linked to socio-political conditions and based on several factors, including the growth and expansion of educational programs, specifically in developing countries; economic and technical growth within those countries; the expansion of the media; and a growing move toward valuing cultural pluralism (Hamers & Blanc, 2000). While in many countries, the national language is used for instruction, others, such as India, support multilingual educational plans. Outside of the United States there is a worldwide trend to support initial literacy instruction in the L1, with continued education dependent on the status and power structure of the minority language (Hamers & Blanc, 2000, p. 328).

While BE is often supported in theory, its demonstration in practice varies in content and the value placed on all languages. English is widely used as a language

of instruction as a result of its role as the *lingua franca* or language used for communication between various groups with different native languages (van Els, 2005). Naturally, the status of the target language, the quality of instruction and learner motivation to acquire the language, as well as teacher competence and program planning all influence the contexts of BE and the success of the program participants.

Conclusion

Many say that the world is growing smaller as a result of technological advances that allow us not only to travel to different places with comparative ease, but also to connect worldwide through a growing number of electronic devices. Never has the need for the ability to communicate with others been so great and the knowledge base surrounding language, language acquisition, bilingualism and bilingual education offers us a glimpse into the theoretical and practical applications for teaching and learning a second, and perhaps a third, language.

Teaching a second language serves an important function in an increasingly diverse world. As more students throughout the world come to school speaking a language other than that in which instruction is delivered, teachers are presented with challenges related to delivering instruction that supports language learning in general and L2 learning and acquisition specifically. Although different countries offer different approaches to teaching, in general teachers need to have a broad base of knowledge about language in order to effectively teach a second language (Fillmore & Snow, 2000). This knowledge includes such things as oral language and language development, grammatical structures in the language in which they are teaching, and the nature of vocabulary acquisition (Fillmore & Snow, 2000). Fillmore and Snow (2000) further suggest that teachers need a "... solid grounding in sociolinguistics and in language behavior across cultures ..." (p. 19), as well as an understanding of linguistic proficiency necessary for success in academic learning and the factors that may impede that learning. The need to include teaching a second language within the framework of pedagogy and programs has become essentially a de facto part of educational planning within global contexts.

Biographical Note

Sharon H. Ulanoff is a Professor of Bilingual/Multicultural and Literacy Education at California State University, Los Angeles, where she coordinates the Graduate Reading Programs and teaches in the Teacher Licensing, Master of Arts and Doctor of Education Programs in the areas of language acquisition, cultural diversity and literacy education. She received her doctorate from the University of Southern California in language, literacy and learning and has 30 years of experience in California's public schools as a bilingual teacher aide, bilingual teacher and bilingual teacher educator. Her research interests include literacy and biliteracy acquisition, cultural identity development, narrative inquiry and practitioner research. Dr. Ulanoff is a frequent presenter at national and international conferences. She also serves on the Book Manuscript Review Board for the International Reading Association and is past Chair of the Bilingual Education Research Issues Special Interest Group of the American Education Research Association.

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TEACHING IN ARTS EDUCATION

Peter Wright

Introduction

Arts Education has the potential to play an increasingly important role in the education of young people around the world. This role includes contributing to the development of young people's critical and creative facility and thereby developing in them cultural, personal and social agency. These abilities can be seen to become increasingly important in times of neo-liberalism, rising fundamentalism, global economic development, critical education, and disposability (Giroux, 2006). Consequently, Arts Education and how it is taught has consequences.

What is important to understand, however, is that the role that Arts Education – like all education – plays is contextually defined thereby serving a variety of purposes across schools, communities, states or provinces, and countries. This means that provision varies markedly, that teaching is not solely confined to schools, and the way young people engage with the arts, and for what purposes is changing. For example, while all education is contextually defined, Arts Education particularly is increasingly limited less by geography or specific location and more by access to technology, the influences of economically developed societies, youth culture, and an understanding that school is only one 'mode of delivery' for education.

A recent survey of 40 international organizations and countries conducted collaboratively by UNESCO, the International Federation of Arts Councils and Culture Agencies (IFACCA), and the Australia Council for the Arts (OZCO) (Bamford, 2006) highlighted that: the arts are in educational policy around the world; the arts are differentiated in culturally and contextually specific ways with most differences appearing between economically-developed and economically-developing countries; the arts serve a variety of different purposes including learning *in* the arts, that is developing arts specific knowledge, skills, and processes; and learning *through* the arts where this knowledge, skills and processes are employed across the curriculum for a variety of purposes.

Although not described specifically in the Bamford compendium as a third accepted orientation that crosses boundaries is learning *with* the arts. In this orientation the arts are employed for a variety of social purposes including identified special populations (c.f. UNESCO.org) and notions of health and well-being (Mills & Brown, 2004).

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching, 1049–1060.* © Springer Science+Business Media LLC 2009 These different orientations have led to robust debates within the field about the arts being about everything except the arts – that is the *applied* benefits of Arts Education – rather than the *intrinsic* or cultural value of the arts themselves (McCarthy, Ondaatje, Zakaras, & Brooks, 2004). What is emerging is that the arts have a variety of roles to play in helping us understand what it might mean to live together whether it be, 'in the same estate, across the street, or across the world' (Rose & Kincheloe, 2003). In addition, as Greene (1995, p. 20) reminds us 'the world perceived from one place is not the world'.

Where Does it Appear?

Arts Education appears in educational policy around the world. However, Arts Education can have different meanings in different countries. For example, curriculum provision in economically developed countries features greater use of technology than developing countries, whereas the latter are more concerned with transmission of established cultural activities.

The recent development of YouTube (www.youtube.com) and MySpace (www. myspace.com) are contemporary examples. Participation in these virtual spaces that feature personal video clips, often shot on mobile phones, and homepages with original images and content has become omnipresent for many young people. In recognition of young people's participation in this form – the LA Times reported that as at July 2006 the site was receiving 1.5 million hits a day – YouTube has recently been sold for US \$1.65 billion 1 year after its inauguration. The biggest demographic for YouTube is 12–18-year-olds and this demographic, the paper reports, is one that is not watching TV. What this reflects is that young people are expressing themselves differently and using different tools to inquire into their world.¹ Consequently education, and forms of education concerned with inquiry into, and expression of meaning is changing.

Young people, as digital natives (Prensky, 2001) move seamlessly between the visual, embodied and aural often blurring the boundaries between them. What this can mean for teachers is that their students can have greater technical facility that they do, thereby challenging the traditional classroom hierarchy. This different dynamic can invite new possibilities for teaching and learning and developing communities of inquiry. For example, in a rapidly developing world where the teacher is the 'digital immigrant' and student the 'digital native', the dynamic between teacher and student is re-construed. In this context the teacher may no longer be the one with field knowledge. What does not change, however, is the effective teacher's ability to facilitate learning and inquiry through establishing learning opportunities and dialogue between the student, the disciplinary field, and the pedagogical site. It is this dynamic that is the social space of teacher's work.

This dynamic is made more complex by the changing nature of tools used in the pedagogical encounter. For example, the ability to 'undo' and 'save as' enables students to ask a lot of 'what ifs?' thereby changing the traditional nature of learning. Consistently, however, research reveals that the principles that inform effective pedagogy remain constant even though the tools continue to change. These principles involve

both knowing something about the content of the disciplinary field, and how to facilitate this in student's learning (Watson, 2005). A fundamental challenge remains, however, between teaching existing skills and knowledge – thereby preserving established cultural forms and traditions – and arts practices that engage with different forms of inquiry and representation in a post-digital age. This is consistent across all the arts where contemporary performance intersects with the visual, aural, virtual and embodied.

The Difference Between Practice and Policy

Reflecting educational provision generally there is a lag between what appears in policy and what happens in practice. For example, it is common to find single subjects still described and taught in schools with school structures, including timetabling, space allocation, and staffing, reinforcing such provision. However, what young people practice in relation to the arts in their everyday lives can be different. This disjuncture reflects the ubiquitous role of technology and the culture that enables it. For example, arts practices have undergone profound changes in the last two decades as have the societies that produced them (Miles, 2005). Consequently linking the arts and education and contemporary notions of starting where a student is 'at' poses profound challenges.

There is a difference between the attention given in curriculum policy and provision of Arts Education in school education. For example, music and drawing appeared in the 40 countries surveyed for the survey of Arts Education conducted by UNESCO (Bamford, 2006). There is also a hierarchy that exists between arts subjects as reflected by their provision in the curriculum and their history. Recent OECD indicators reveal that in terms of curriculum time visual arts appears first, music is second, and drama and dance third and fourth respectively. In the United States Bresler (2004) reports similar results, and recent research in Australia reflects similar forms of provision noting that new and emerging forms of inter-textual practice appear last (Wright et al., 2006). What this reflects is that some fields of Arts Education are more strongly established in school education though each would claim that existing curriculum time is inadequate to develop the skills and knowledge young people need. This disparity between art forms has meant that tensions exist between them and advocacy has predominantly been focussed on parts instead of Arts Education as a whole.

Consequences of the Construct

There are two recent policy developments that are significantly shaping the field. First, is the development of the Arts Education as a construct or Learning Area. What this has done is to raise the profile of the field by combining the arts in ways that once may not have been possible. This means that the arts have a higher profile through the synergies that can occur between them. This is reflected in developments like the Contemporary Principles of Arts Education in Australia (2002), the Arts Education Partnership in the United States, and Creative Partnerships in the United Kingdom. However, concern has also been expressed that this amalgam has meant less visibility for individual arts subjects. This has meant that some schools – in the context of a crowded curriculum – have sought to meet learning objectives across the learning area rather than inside specific art form subjects. Consequently, one outcome has been a diminution of teaching time across the learning area with limited skills development for students as schools have tried to meet generic arts objectives rather than those that are art form specific.

The second associated development has been the introduction of arts literacy as a curriculum construct for the first time in one country (Australia).² This form of development that draws on the powerful connotations associated with 'literacy' offers new opportunities for arts educators.

Purposes of Arts Education

There still continues to be a lack of clarity about the purposes of Arts Education. This is particularly reflected in economically developed countries. There is debate, for example, about intrinsic or extrinsic benefits, high or popular culture, the importance of socio-cultural approaches, or whether an education in the arts is about reception or creation (Australian Expert Group in Industry Studies of the University Of Western Sydney, 2004). Unfortunately, this is typical of the sorts of (mis)understandings that encourage binary oppositions.

What recent research and scholarly theorising reveals is that as with so many facets of education, binary opposites don't help – they obscure a more nuanced knowledge base of our practice through promulgating an either/or scenario that promotes measurement rather than understanding. For example, there is more than intrinsic benefits to the arts, benefits are *also* instrumental; there is more than measurement, there is both assessment *and* understanding; there is more than cognition or affect, there are *also* kinaesthetic and somatic ways of knowing. Consequently, the multi-modal inquiry that helps circumscribe Arts Education and is possible through using the head, heart and body, leads us away from the *either/or* debates that have for so long perpetuated the field towards a more sophisticated understanding of *BOTH/AND*.

What this means is that quality Arts Education involves both artistic and technical merit, AND participation and social relevance; both effective classroom pedagogy AND partnerships between teachers, artists and communities; both education *in* the arts, AND education *through* the arts; both provision for critical thinking, problem solving, risk taking AND an emphasis on collaboration and inclusion; and both opportunities for exercising individual's imagination and creativity AND for public performance, exhibition and/or presentation of work to others. Better understanding the complexities and nuances of the field enables advances to occur unimpeded by reductionist or entrenched positions.

A consequence of these misunderstandings is the way they inhibit the development of the field and diminish what is what now well understood; that young people benefit in a variety of ways from an education in the arts. It is the case for example, that even conservatories, as centres of advanced arts training, are recognising that graduates will play a potential wide range of roles beyond mastery of the art form and passing on long established cultural traditions. These roles, for example, include teaching, community building, advocacy, and developing a new generation of arts leaders as the cultural landscape changes. In other words, Arts Education, even in specialist institutions needs to do more than skills development – it needs to educate for an evolving world. What this means is that there are expanding opportunities and challenges for arts educators beyond the preparation of artists.

Research and Scholarship in Arts Education

To date much of the current scholarship in Arts Education has been associated with advocacy. This has meant that substantial energy has been devoted to justifying the role of the arts in education, and the development of a substantive research agenda in the field has been comparatively recent and is emergent. This development has also not been consistent across arts subjects. For example, research in music and visual Arts Education has been established longer than in drama and dance with research-focussed journals appearing in 1953–1959 (Music/Visual Arts), 1996–2000 (Drama/Dance) respectively.³

It is also interesting to note how much early research in Arts Education reflects a psychological orientation. This being influenced in part by well established paradigmatic forms of knowledge creation that have reflected formal (bio-medical/scientific) approaches to research. Consequently, the development of complementary research methods (Barone & Eisner, 1997) that reflect the conceptual terrain of the arts have profoundly influenced how research has been conducted, the questions that can be asked, and knowledge constructed.

What Is Distinctive?

There are a number of distinctive features of learning in Arts Education. These include how learners are active, interconnected, work experientially in multi-modal ways, use their imaginations, draw on and develop their aesthetic sensibilities, and are reflective on experience. This notion, elaborated in part, includes how students are involved in arts-practice that is studio-based,⁴ and hence actively involved in the construction and reconstruction of meaning.

Bourriard (2002) highlights the power of the social in this process with his notion of relational aesthetics. Learning in Arts Education is also distinctive in the way that it is embodied, kinaesthetic, affective and circumscribed by an aesthetic field. In short, learning that connects the hand/body, heart and head. What is particular about this learning is the way that it draws on contemporary understandings of aesthetics, that is not just beauty – which is always time and culturally determined – but what provides coherence, utility, critique and intersects with personal and cultural significance. It is this aesthetic dimension that develops learner's critical thinking – the ability to make qualitative judgements – and makes sense of their lived experiences and the world around them (Diaz & McKenna, 2004).

It is this *active* sense of the word that is important as students construct and reconstruct their experience informed by their developing knowledge of the world

of the arts and artist – including skills, processes, forms, styles, conventions, and techniques. In this act students draw on their own developing knowledge, previous experiences and attitudes towards them as they become immersed and engage in increasingly sophisticated ways with those experiences and reflect upon them.

The Past, Present and Future – Informing Understandings of Arts Education

The Past

When we seek to better understand Arts Education, then a consideration of three moments help reveal it; the past, the present, and the future. What is important about understanding the 'present' in arts education is how it is informed by its history, and some of the debates that are a consequence of the past. For example, there are a number of identified periods of Arts Education that move from the arts to support society; to enhance the individual child; the emergence as a curricular discipline; to the arts as *in* culture and *as* culture (Chalmers, 2004; Dobbs, 2004). In contemporary approaches it is possible to see elements of each of these histories (Bates, 2000). The present also particularly reflects how Arts Education is developed through its practice. What is important about this development is how this is grounded in the field and informed both by educators and emergent arts practices. Consequently, a challenge for arts educators and policy developers is that this practice is ephemeral in nature, though the consequences of it are not.

The Present

More recent developments within the field and increasingly reflected in curricula documents is the notion well expressed by Beuys is that all young people are creative, and essentially 'every human being is an artist' (Tisdall, 1974, p. 48). This is contrast to a traditional view of the arts being the exclusive province of a gifted and talented few. Egan and Ling (2002) note, for example, that we all begin as poets and Robinson (Australia Council for the Arts, 2006) reports how some measures of creativity reveal how this capacity is diminished as students progress through the education system. There is now a clearer understanding that imagination and creativity are part of every human's potential and these facilities and attitudes can be strengthened, extended and developed.

One of the tensions existing in the field is that between preserving long established cultural traditions, and new emergent forms. For example, there are arguments rehearsed that suggest that young people require access to the established cannons of western culture in order to be well-educated. The alternative view is that new structures are transforming cultural space and time and there is no universal view of art and aesthetics (Rose & Kincheloe, 2003). One accessible example was the resistance expressed to photography and cinema as art forms and this pattern is repeated across the arts as new forms or art 'periods' developed. There are also reports that in

spite of young people engaging less with traditional forms of arts curricula, they still see the arts as an important part of their every day lives (Sloboda, 2001). It is also apparent that young people will continue to appropriate the arts for their own uses and purposes and this can lead to a disjuncture between traditional curricular and the arts in student's every day lives. This poses particular problems for teachers who are charged with building bridges between student's lives, the communities they serve, school and curriculum.

The Future

A further development with the potential to impact on Arts Education has been the emergence in some economically developed countries of the Creative Industries construct. This development has seen the confluence of a number of creative domains into the Academy including fashion, the digital, as well as contemporary performance and the synergies between them. This change reflects the developing awareness of the importance of cultural 'industries' in terms of economic development, and what has been termed the new 'creatives' into business (Florida, 2002). Underscoring these developments has been a continuation of notions of school as preparation of 'skilled' labour for employers. There is, however, a discontinuity between 'economic' or 'work-force' development arguments for Arts Education and preparation of new 'creatives' because arts corporations or employers either are not well established or prefer contractual project-specific forms of employment in contrast to employing other professionals. If we also accept that there is a blurring of boundaries between professions and that what is learnt through Arts Education is transferable - and there is further research to be done in this regard - then education in Arts Education can play an especial role in developing both creativity and innovation.

It is the development of the new 'creatives' that will impact significantly on the future. Importantly, this impact will be more than economic as these creative professionals are unbounded by discipline. This development reflects a new found interest by governments in the benefits of 'creativity' in the knowledge economy and issues made manifest by globalisation (Burnaford, Aprill, & Weiss, 2001; Center for Arts & Culture, 2006; Cunningham, 2006; Robinson, 2001). What is important about this development is that the skills, aptitudes, and abilities developed through an education in the arts are not seen as the provision of a 'gifted' few, but can be systematically developed through good pedagogy (National Advisory Committee on Creative and Cultural Education, 1999). Consequently, Arts Education can be seen to be undergoing a renaissance with the world's first international Arts Education conference sponsored by UNESCO recently held in Portugal (c.f. Booth, 2006).

While the future is fundamentally unpredictable, it is clear that Arts Education will continue to evolve and develop changing shape, form, content and skills. This is because Arts Education is particularly responsive to cultural change and developments in technology – in many cases leading that change. Consequently, skills sets and content knowledge will evolve. Understandings in the field are changing. This is driven in part by changes in technology and evolving forms of practice. Schools need resources and teachers need professional development in order to be up-skilled in new technology.

Key Principles

There are a number of key principles that underlie Arts Education. First is the notion that engagement with the arts has the power to change people (no matter what their age or stage of development). Inherent in this belief is that everyone is inherently creative, with creativity being one of the defining characteristics of the arts. Central to this idea is the concept of lived-through experience. Dewey, for example, highlights how in Arts Education we interested in more than 'from the neck up'.

Second is the principle that understanding is created, and importantly for education re-created, through the construction and reconstruction of experience. This kind of transformational learning involves the whole person. What this means is that Arts Education involves thinking, feeling, perceiving, and doing. Third is the principle that learners, in order to function with confidence and competence in the field, should be initiated from earliest ages into the different codes, conventions and forms of the arts. This means that learners are gradually introduced to stage appropriate arts practices and experiences where both the processual aspects and outcomes of the arts are valued. Consequently, as these skills and knowledges develop students have an increased capacity to inquire into issues that concern them and express themselves in this regard. At its best Arts Education reflects intertextual forms of inquiry and ways of knowing.

It is the nexus of these principles that increases student's feelings of confidence and self-respect. Consequently, they develop agency and exercise their capacity for democracy - in Greene's words to 'look at things as if they could be otherwise' (1995, p. 15).

Teaching in Arts Education

There have been various attempts to define effective teaching in Arts Education. These have occurred within the context of individual fields – that is drama, music and visual arts – rather than across Arts Education itself. These various projects have produced knowledge that ranges from the general to the highly specific. This advice includes that which applies equally across all learning areas, such as effective teaching includes both knowledge of a content area, and pedagogy (Watson, 2005) to the highly specific – see for example the extensive checklists generated in visual arts (Sharp El Shayeb, 1996). Each of these on their own fails to take into account our understanding that all education is contextually bound so on their own are necessary but not sufficient for understanding effective teaching in Arts Education.

It is possible, however, to draw out some general principles that help describe the field. First, effective teaching in Arts Education involves both teaching arts skills and processes as well as providing opportunities for students to exercise their own personal creativity. Second, the quality of relationship between teacher and student is of especial significance. This is because when students are significantly engaged in the arts they are drawing on their personal experiences and stories often not seen in other learning areas. Hence a deep knowledge of student's strengths, limitations and the resources they have to draw on enables the teacher to provide pedagogical experiences

that support the student in his or her exploration of their creativity as well as developing the artistic skills, processes and knowledge needed to do this. Third, is that teachers have sufficient knowledge of the arts including the aforementioned requisite skills – both pedagogically and artistically – in order to make informed judgements for students learning. In short, as Wilson (1985, p. 98) describes, good teaching in Arts Education 'assists students in understanding, constructing, and working with symbolic worlds'.

The issue of identifying good practice or 'ideal' model of Arts Education is also made more complex by the changing nature of the field. Arts Education is among the most dynamic learning areas studied in schools – this dynamism being one of its defining characteristics. Boughton (1989), for example, when considering Visual Arts Education highlights the range of interrelated influences that shape both content and practice. These include social changes, economic imperatives, political pressures, ideological changes in education and the arts world, technological developments, and increasingly research findings.

What this means is that good practice is in a large part determined by what imperatives teachers are responding to. For example, Hillman-Chartand (1986) documents the development of design in programmes as a result of the importance of advertising in the economy, and the importance of those developments in raising awareness of the elements of good design. Boughton (2000) also documents the split ideologically in the late twentieth century in art education between those who promote and value modernist assumptions, and those who endorse post-modernism. What this means for good teaching then varies depending on whether a teacher is influenced by one ideology or the other; this effects for example, questions of the relationship between the 'value of originality, support for popular versus fine arts, the influence of new technologies, the role of dominant and minority cultures, and gender issues in art and education' (Boughton, 2000, pp. 960–961).

There are also concerns that arts educators hold that appear wide spread. For example, Russell-Bowie (2004) identified six concerns held consistently across research sites in five countries – Australia, Ireland, Namibia, South Africa, and the United States – that effect the provision of quality arts teaching. These concerns include teacher's perceptions in relation to: lack of personal arts experiences, lack of adequate preparation time, lack of time in the teaching day, lack of status for the learning area, and lack of resources within schools.

Arts Education and Inclusive Education

Arts Education and the forms that comprise it have a long history of involvement with inclusive education. There are well-established foundations with a history of supporting the arts in educating students with special needs and an active international organisation with the same intent. Arts Education plays a powerful role in inclusive education and has an especial role to play in developing preservice teachers. This role includes developing dispositions towards students with special needs through supportive inclusive practices where individual outcomes are welcomed, where there is an emphasis on collaborative teaming, where aesthetic development is employed to develop critical competencies, and where arts skills and processes can be seen as 'assistive technologies' (Van Laarhoven, Munk, Lynch, Bosma, & Rouse, 2007). It is also the case that working in the arts also allows teachers glimpses into student's abilities and lives that may not happen in other learning areas as arts processes reveal more of student's resources, capacities and individual and social identity than other curriculum areas. Consequently, Arts Education not only contributes to a holistic education, but also to the knowledge, skills and attitudes of those who teach it.

Biographical Note

Peter Wright is a scholar in the School of Education at Murdoch University, Perth, Western Australia. He teaches in Arts Education and has led and contributed to national projects inquiring into the status and delivery of Arts curricula. His research includes the social impact of arts with disenfranchised groups, teacher development in Arts Education, and the impact of the arts on learning. He is particularly interested in arts-informed approaches to educational research. His experience includes early childhood, primary, secondary, and tertiary education. Reflected in his teaching and research is a commitment to the power of the arts as inquiry, expression, transformation and the development of personal, social and cultural agency.

Note

- 1. It is possible for a young person to launch a successful musical career on the net from a computer via their MySpace profile see Lilly Allen for example.
- 2. The Tasmanian Essential Learnings Framework (Tasmanian Education Department, 2004) explicitly includes *being arts literate* as part of 'Communicating' along-side *being literate, being numerate,* and *being information literate*.
- 3. The dates are somewhat arbitrary depending on what is considered as 'research'. Research-based articles also have a long history of publication in a variety of journals.
- 4. Here studio can encompass the rehearsal room, workshop space, laboratory, or it may exist virtually.

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RESEARCH ON TEACHING HEALTH AND PHYSICAL EDUCATION

John R. Todorovich

Introduction

Research in health and physical education (HPE) is neither new nor unidimensional. Rather, researchers engaging in HPE research have produced numerous studies evolving in complexity and clarity over a relatively short 35 years of concerted and focused research. Indeed, comprehensive reviews of early research were possible because of few research lines and a short research history (e.g., Nixon & Locke, 1973). Today, however research in health and physical education is a broad and multifaceted endeavor.

Due to the complex nature of HPE research, this chapter was written with the more narrow focus of research on teaching health and physical education (RT-HPE). This focus involves "research on what teachers and students do and how this affects and relates to learning and social dynamics of the class" (Silverman, 1991, p. 352). This does not include research on teacher education, research on curriculum or behavioral theory, or research on curricular interventions. A review combining two or more of these areas is beyond the scope of this chapter and can be found elsewhere.

When faced with the daunting task of looking at all the research available and considering the definition of RT-HPE used to guide the chapter, three broad areas of research emerged. The first involves *research on HPE teachers*. Research on HPE teachers provides us with knowledge on how teachers are socialized into teaching HPE and how such things as their beliefs, concerns, values, and knowledge shape their perspectives and teaching behaviors. As the primary facilitator of learning in HPE settings, the teacher becomes a central unit of focus for researchers. A second category involves the processes teachers engage in when teaching. This section, *research on HPE teacher behaviors*, describes the pre-impact (planning), impact (what happens during instruction), and the post-impact (assessment and reflection) phases of the instructional process. The final section, *research on HPE students*, addresses the importance of the student as an important factor in the mediation of their learning within the instructional process.

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Research on HPE Teachers

Research on HPE teachers includes research that looks specifically at the characteristics of teachers. This line of research informs us of the perspectives, abilities, motivation, and knowledge that influence teacher effectiveness, and it provides us with information on how these characteristics are shaped.

Teacher Socialization

While early research described why physical or health education teachers chose their profession, these studies provided little insight until Lawson (1983) built on the initial work of Lortie (1975) and Pooley (1972) to focus on the process of teacher socialization. Lawson (1983) then described the process of teacher socialization through the *subjective warrant*, which represents one's perspectives on the belief systems that define a given profession. Researchers have theorized about the influence of the subjective warrant (e.g., Dewar & Lawson, 1984; Schempp & Graber, 1992), but these theorizations have not been tested with empirical evidence. In the physical education domain, research on the influence of preservice teacher's interest in coaching and its influence on teacher socialization and the subjective warrant, however, has received more attention (Chu, 1984; Figone, 2001; Hutchinson, 1993; Templin, Woodford, & Mulling, 1982). Most of the research in this area indicates that preservice teachers perceive of teachers as a bridge to coaching – their desired profession.

Teacher Beliefs, Concerns, and Value Orientations

Teachers' beliefs, values, and concerns influence teaching behaviors. As a result, research lines have developed addressing these characteristics.

Research on teacher beliefs investigate what teachers perceive to be true or false about their careers. Although beliefs are difficult to define and measure (Pajares, 1992) and they may weaken, emerge or disappear over time (Ajzen, 1988), researchers have reported relatively consistent findings regarding teacher beliefs. Teacher education recruits and prospective teachers enter the profession with a broad range of beliefs about the purposes of teaching health and physical education (Goc-Karp, Kim, & Skinner, 1985; Matanin & Collier, 2003; Placek et al., 1995). The beliefs held by early preservice and prospective teachers seem to be tempered by teacher education programs as researchers found differences between in-service teachers and prospective teachers (Dodds, & Locke, 1995; Graham, Hohn, Werner, & Woods, 1993; Matanin & Collier, 2003). Unfortunately, research also reveals that some teachers revert to their early beliefs on teaching over time (Dodds, 1989; Locke, 1984).

Many investigations of teacher concerns in HPE reveal that teachers experience "phases of concerns" which support Fuller's (1969) stages of concern theory (e.g., McBride, Boggess, & Griffey, 1986). Conversely, research by Behets (1990) and Meek (1996), among others, fails to fully support the stages of concern theory in the physical education domain. For example, a longitudinal student of the stages of development or concern of secondary PE students in England showed no changes

over time and participation in four school experiences (Capel, 1998). The development and refinement of instruments such as the Teacher Concerns Questionnaire for Physical Education (TCQ-PE; McBride, 1993) continues to hold promise to extend this line of research.

Closely related to, but more refined than previous research on teacher beliefs and concerns, is research undertaken primarily by Ennis and colleagues on the development of teacher value orientations (Ennis, Ross, & Chen, 1992). Value orientations are an amalgam which combines one's beliefs and philosophy that shape the perspectives of the teacher in regards to students and their teaching. Much of the early work in this research line employed the Value Orientation Inventory (Ennis & Zhu, 1991) and its later revision (Ennis & Chen, 1993) to determine teacher value orientations and to look for relationships between teacher value orientations and their teaching behaviors. Findings indicate that environmental factors may override one's value orientations (Ennis, 1992; Ennis et al., 1992) and urban teachers have a strong orientation toward improving the social conditions of students (Ennis & Chen, 1995). More recently, researchers have found that value orientations may differ between secondary and elementary school teachers in the area of physical and health education (Behets & Vergauwen, 2004).

Experience and Expertise

Although early researchers interested in teacher experience and expertise used the terms interchangeably, most researchers now agree that while the terms are linked, they are not synonymous (Dodds, 1994; Siedentop & Eldar, 1989). Teaching experience reflects only time spent engaged in the teaching process acquiring a collection work-related memories. While individuals must have many experiences to develop expertise, experience alone does not generate expertise. As a result, researchers have given much attention to expertise (Dodds, 1994; O'Sullivan & Doutis, 1994; Schempp & DeMarco, 1996; Sharpe & Hawkins, 1992); however, it still remains difficult to define and theoretical frameworks to study expertise in health and physical education need to be refined.

Research investigating teacher experience indicates that experienced teachers planned with more contingency concerns and require more information when planning, have, had students with less off-task behavior, less waiting time for the students, and more easily made adjustments to teaching when the lesson did not go as planned (Byra & Sherman, 1993; Griffey & Housner, 1991). Housner and Griffey (1985) concluded that experienced teachers held knowledge structures that were rich in effective teaching strategies and made more instructional decisions when planning lessons. While these findings demonstrate the importance and influence of experience on expertise, other research suggests that experience alone is not enough to produce expert teachers and the differences between novice and experienced teachers, in some cases, may be minimal (van der Mars, Vogler, Darst, & Cusimano, 1995).

HPE teacher expertise has proven difficult to define although it has received much attention (Schempp, & DeMarco, 1996; Siedentop & Eldar, 1989). What we typically find are descriptions of factors that describe expert teachers such as their knowledge

and success, but a specific definition remains elusive. Researchers, however, have demonstrated that teachers characterized as experts seem to have a large repertoire of knowledge to draw from to make decisions in the instructional context (Dodds, 1994; Graham, French, & Woods, 1993; Sharpe & Hawkins, 1992).

Teacher Knowledge

In the mid 1980s, Shulman (1986, 1987) described four types of knowledge that teachers possess. *General pedagogical knowledge* is a teacher's knowledge of the principles and strategies of effective teaching. *Content knowledge* is the teacher's knowledge of the subject matter pertaining to their discipline. *Pedagogical content knowledge* involves the collection and integration of knowledge of content, students, and pedagogical principles that guide the teaching of a particular subject to a particular set of students. Finally, *curricular knowledge*, is one's ability to use knowledge of content to combine and adjust to developing appropriate lessons and units with sufficient scope and sequence.

Although it has received relatively little attention, research on general pedagogical knowledge indicates that this knowledge is important for the development of expertise (Berliner, 1988; Dodds, 1994) and is influenced by students and the teaching environment (Graber, 1995). In physical and health education, while much rhetoric occurs around teacher content knowledge, research in this area is noticeably missing. However, Hastie (1996) found that high school teachers with greater content knowledge were more effective in behavior management and instructional tasks than teachers with less content knowledge. Curricular knowledge in health and physical education has also been largely ignored by researchers; yet, Rovegno (1993) did find that preservice teachers learning to teach a movement approach in physical education experienced internal conflicts with their curricular teaching beliefs.

Perhaps one of the most researched constructs of teacher knowledge in HPE is research on pedagogical content knowledge (PCK) conducted by Rovegno (1992, 1994, 1995) and Barrett and Collie (1996). Collectively, this research indicates that researchers can investigate PCK (Barrett & Collie, 1996), preservice teachers value the acquisition of PCK (Rovegno, 1992), and teachers revert to a "curricular zone of safety" when faced with students in real classroom settings (Rovegno, 1994, 1995).

Teacher Enthusiasm and Expectations

Arguably, research on teacher enthusiasm and their expectations for students could be placed in the teacher impact section because these characteristics directly impact students perceptions and learning. Moreover, researchers have discussed teacher enthusiasm as a malleable trait that could be used to influence student learning (Behets, 1991; Locke & Woods, 1982). Unfortunately, little work on teacher enthusiasm has occurred since the early 1980s when promising results indicated that teacher enthusiasm had positive influences on student engagement and learning (Carlisle & Phillips, 1984; Rolider, Siedentop, & Van Houten, 1984). Further research can be found on teacher expectations.

Teacher expectations consist of those beliefs and perspectives that teachers hold toward student performance and behavior, and these behaviors are often exhibited externally. Research on teacher expectations suggests that teachers provide more support to students who have high ability (Martinek & Karper, 1982, 1986), attractive students receive more positive support (Martinek, 1981), students of high ability recount more positive praise than lower ability students (Martinek, 1988), and somatotype and gender influence teacher expectations (Szajda, 2003). Martinek and colleagues have also identified students who have received little support because of lack of high teacher expectations develop "learned helplessness" where students believe they are incapable of achievement because of past negative experiences learning in physical education (Martinek, 1989; Martinek & Griffith, 1993; Walling & Martinek, 1995).

Research on HPE Teacher Behaviors

Research on teacher behaviors in the RT-HPE domain involves analyzing the pedagogical behaviors teachers employ when teaching their students. Pedagogical behaviors can be classified as *pre-impact* (i.e., occurring before the lesson), *impact* (i. e., occurring during the lesson), and *post-impact* (i.e., occurring after the lesson).

Pre-Impact

Pre-impact teacher behavior consists of planning, which may occur minutes or even months before the lesson. Research on planning indicates that planning promotes more active and effective teaching (Imwold et al., 1984; Twardy & Yerg, 1987). For example, Byra and Coulon (1994) found that teachers who planned had students who were off-task less and had higher instructional time because students spent less time waiting. Other researchers found that teachers change their planning as they gain more experience by demonstrating less writing (Barrett, Sebren, & Sheehan, 1991) and requiring more information to plan lessons (Griffey & Housner, 1991). Finally, with the exception of Stroot and Morton (1989) who found that teachers focused on objectives while planning lesson, most researchers found that teacher in health and physical education planned their lessons with a focus on lesson activities (Goc-Karp & Zakrajsek, 1987; Placek, 1984).

Impact

Research on instructional and managerial tasks is an integral part of the teaching effectiveness literature providing both teachers and teacher educators with information that can improve teaching in physical and health education (Rink, 1996; Siedentop, 1989). Unfortunately, teacher effectiveness research proves difficult due to such factors as teacher and contextual differences, differences among students (Dodds & Placek, 1991), and expectations for complex data collection and data analysis procedures (Silverman & Solmon, 1998). Many studies, however, do provide

information on the influence of teacher behaviors and actions on students perceptions, performance, and learning.

Task Presentation and Content Development

Rink (1993, 1994) identified task presentation and content development as critical components of the instructional process, and studies of effective teaching have indicated that teachers who present tasks with full demonstrations, use appropriate cues, and are considered clear elicit effective learning outcomes among students (Werner & Rink, 1989). Content development (organizing tasks) consists of teachers using informing tasks, refining tasks, and extension tasks during teaching (Rink, 1994), and some research suggests that task progression may provide better learning opportunities for students than engaged practice time (French et al., 1991).

Classroom Management

Maintaining behavior and efficient organization of students is an important and necessary function of the instructional process conducted with non-instructional tasks that teachers employ to maintain the learning environment (Rink, 1996; Siedentop, 1991). Researchers have demonstrated that the development of clearly established managerial routines and rules in a classroom create effective learning environments (Fink & Siedentop, 1989; O'Sullivan & Dyson, 1994). To be effective classroom managers, teachers must exhibit what Kounin (1970) refers to as "withitness" and have quick and accurate responses to student actions as a result of active supervision to deal with off task behavior or praise on-task, successful behavior(Johnson, 1995; van der Mars, 1989; van der Mars, Vogler, Darst, & Cusimano, 1994).

Teaching Styles

The education literature talks at length about types of classroom instruction such as direct-teaching, constructivism, and others; in physical education, Mosston's (1966) spectrum of teaching styles is the framework that has produced the most robust research in physical education (Mosston & Ashworth, 1994). This spectrum indicates instructional approaches that range on a continuum from high teacher control to high student control. Research on the spectrum reveals that preservice teachers trained with the spectrum utilize more effective teaching behaviors (Ashworth, 1984), the type of task and student ability significantly influence student learning and performance (Boyce, 1992; Goldberger & Gerney, 1990; Harrison, Fellingham, Buck, & Pellett, 1995). Other research on the spectrum reveals that students learning in the spectrum may develop unplanned skills and abilities as a result of the style used. For example, Byra and Marks (1993) showed that students learning were more receptive from receiving feedback from peers than from teachers, and some students' creativity scores increased when learning in styles that called for decision-making and responsibility (Schempp, Cheffers, & Zaichkowsky, 1983). Interestingly, while other teaching

style models (Hurwitz, 1986) have been introduced, these models have inspired little interest among researchers.

Feedback

While feedback is common component of many health and physical education methods courses, little research supports, and some contradicts, our knowledge base related to teacher feedback. Furthermore, what we know about classroom research and findings from motor learning research has little bearing on teaching in either health or physical education settings because the dynamics of health and physical education settings are much different from controlled laboratory or other academic domains (Locke, 1990). Indeed, a myriad of other factors that influence student learning such as number of practice trials or the learning task itself is likely to confound the effect of feedback on performance (Lee, Keh, & Magill, 1993; Silverman, 1994).

In contrast, however, to the negative rhetoric regarding research on feedback, some researchers found that proper feedback can increase knowledge and performance in physical education (Boyce, 1991; Masser, 1993), specialists give higher quality feedback than nonspecialists (Cloes, Deneve, & Pieron, 1995; Solomon, Lee, & Hill, 1991), and students may have higher rates of success after receiving feedback (Pellett, Hanschel-Pellett, & Harrison, 1994). However, even if one concludes that proper feedback improves student performance, other researchers have found that teachers may have difficulty giving feedback and assessing student weaknesses (Stroot & Oslin, 1993), feedback may often be very negative (Fishman & Tobey, 1978) or little negative feedback may be given at all (Silverman, Tyson, & Krampitz, 1992). Indeed, Yerg (1981) even indicated that feedback may actually influence negative performance. Clearly, research in feedback, while burgeoning, needs to be continued to provide clearer answers about the use of this important teacher tool.

Academic Learning Time

Since Daryl Siedentop first described Academic Learning Time (ALT) research as the "new kid on the block" (Siedentop, 1983, p. 3), it has matured into a robust research line in RT-HPE. As academic learning time grew in popularity as an important variable for teaching research, instruments were developed (e.g., Academic Learning Time in Physical Education, ALT-PE) to measure student engagement (Buck & Harrison, 1990; Siedentop, Birdwell, & Metzler, 1979; Siedentop, Tousignant, & Parker, 1982).

Researchers have produced many findings related to ALT-PE in the physical education domain. First, considerable research has been conducted on the amount of time students spend appropriately engaged in learning activities. This findings show that students generally spend very little time in meaningful skill development tasks (Godbout, Brunelle, & Tousignant, 1983), that high ability students usually experience more success and are more engaged than students with low ability (Buck & Harrison, 1990; Grant, Ballard, & Glynn, 1989; Schute, Dodds, Placek, Rife, & Silverman, 1982), and less-skilled students are more likely to be influenced by appropriate or inappropriate practice (Silverman, 1993). Next, More experienced and specialist teachers have
been shown to have students engage in greater amounts of learning than novice or non-specialist teachers (Behets, 1997; Placek & Randall, 1986). Effective planning was also shown to positively influence ALT-PE (Metzler & Young, 1984), and it was indicated that there was a relationship between teacher expectations and student engagement (Cousineau & Luke, 1990). ALT has spurred much interest among researchers and some is known, but additional research avenues, such as ALT relationship to learning different content remains ignored.

Post-Impact

The post-impact phase of RT-HPE is the least investigated area of the instructional process, yet it has received increased attention during the last decade which should bolster research efforts. Research in this area consists of research on assessment and reflection.

Assessment

Although much has been written about and many examples of assessment instruments and procedures are readily available, researchers have produced relatively little studies on how teachers engage in assessment and its influence of the instructional process. Researchers tend to agree, however, that the use of assessment in the HPE setting by teachers is generally contrary to what these teachers were taught in teacher education or inservice programs – even in light increased pressure on teacher accountability (Doolittle, 1996; Wood, 1996). Typically, at least in the physical education setting, teachers are more likely to focus their assessment on student behavior, teacher perceptions of student effort, and dress (Wood, 1996). Although teachers seem to ignore effective assessment practices, researchers have become enchanted with "authentic assessment" as opposed to traditional assessment, but authentic assessment has its own problematic peculiarities and may be even more difficult for teachers to employ than more traditional approaches to teaching (Lund, 1992; Schwager, 1996; Smith, 1997; Wood, 1996).

Reflection

Although teacher educators ask their students to engage in reflective teaching, surprisingly little is known about the importance of being a reflective teacher; its importance is essentially ratified by intuitive thought. As an act, reflection is characterized has having different forms such as being thoughtful or routine and technical or moral (Tsangaridou & Siedentop, 1995). The scant research that does exist on reflection reveals that teachers can be taught to be reflective (Byra, 1996) and this reflection might make mental connections between knowledge structures of preservice teachers (Sebren, 1995). It is also believed that, by nature, some teachers are more inclined to be reflective than others (Rovegno, 1992). Because teacher educators are inclined to promote teacher reflection and it has intuitive value, more research should be done to clarify its value to both the preservice and practicing teacher.

Research on HPE Students

While RT-HPE is defined as primarily teacher centered, no review HPE research would be complete without discussing students as mediating factors in the learning process (Solmon & Lee, 1996). This is significant because students are not merely recipients of knowledge and skills bestowed upon them by their teachers. Rather their perceptions, knowledge, understandings, and ability mediate behavior and performance. Research on children and learning is vast. As a result, this chapter will only cover a few salient components closely related to student learning in HPE settings.

Since Doyle (1979) first began to describe the ecology of the classroom through the instructional and managerial tasks that teachers employ, researchers have recognized students as being influential in the classroom setting. Hence, it is not the teachers alone that decide how learning takes place, but the result of a subtle negotiation between the teacher and his or her students (Siedentop, 1983). These social systems developed by student interaction can produce positive and negative results, but effective classroom management creates more positive classroom ecologies (Jones, 1992). Further research has developed a clear picture that the managerial system that teachers use and the content they teach are the influential factors that drive the social ecology of the classroom (Hastie, 1995; Hastie & Pickwell, 1996; Carlson & Hastie, 1997).

Additional research on student participation patterns and background characteristics has further explained that student participation during class influences the instructional process. Griffin (1984, 1985) produced two classic studies on girls and boys participation styles in middle school physical education revealing that even within genders there are different participation styles. Other researchers have shown that teachers respond to student characteristics differently, thus influencing student performance and perceptions and participation in the learning environment. For example, Dunbar and O'Sullivan (1986) described teachers who treat students inequitably based on individual characteristics. Other researchers have shown that the instructional process tends to favor boys and high participants in physical education (DeVoe, 1991; Macdonald, 1990).

Probably the most recent and robust areas of research on student learning in HPE has been in the area of student motivation, and, by far, research on students' achievement goal orientations (Nicholls, 1984) dominate theoretical used. In general, achievement goal theorists posit that how individuals perceive of their success and their understanding of the relationship of one's ability and effort mediates their perspectives and motivations in achievement settings. Research in this area ranges from intervention studies that have manipulated the motivational climate to influence students achievement goals in physical education (Todorovich & Curtner-Smith, 2002, 2003; Treasure,) to longitudinal studies of the influence of perceptions of the psycho-social environment and achievement goal orientations on student performance (Gano-Overway & Ewing, 2004; Xiang, McBride, & Guan, 2004). One should note, however, that the robust interest and current activity in this area goes far beyond what is appropriate for this chapter and, as a result, much information is missing from this area.

Summary

RT-HPE has much promise for providing teacher educators and others with knowledge about teachers, students, and the learning process in the HPE domain. This is clearly evidenced by the research presented in this chapter which only highlights the current complexity of the RT-HPE field. Fortunately, the sophistication and complexity of RT-HPE continues to develop, and overtime will provide researchers and teachers with even more knowledge about the teaching-learning process in HPE. However, the review of research in this chapter also reveals two important findings that should be addressed by HPE professionals. This includes research areas with relatively few studies to support suppositions and the instructional process and the noticeable absence of research on teaching from the health education field.

Perhaps one of the easiest criticisms to make of RT-HPE is that researchers in this area seem to develop research lines consisting of only a few studies and teacher educators adopt teaching practices based on little significant empirical evidence. Noted examples include research on teacher reflection and feedback. These teacher behaviors receive much attention in teacher education programs, but further research should be conducted to confirm the effect of these behaviors on student learning. While the sophistication and complexity of RT-HPE is revealed by many areas of research, the weakness comes from researchers too quickly becoming comfortable with an area of interest and then moving on to other endeavors.

Another area of concern is that HPE research into the twenty-first century indicates a decrease in research on teacher effectiveness. While contributions to our knowledge base continues to flourish in our understanding of teacher and student cognition and motivation and interventions to decrease obesity, teacher educators are provided with fewer recent studies directly related to improving teacher performance. While it is true that teacher effectiveness research can be cumbersome and difficult to complete (see Silverman & Solmon, 1991), the simple fact remains that the HPE profession knows far too little about the teaching process at present to abandon this area of inquiry.

Probably the most salient finding from reviewing this research is the absence of research on teaching effectiveness in health education. Indeed, while health education researchers indicate that teacher training plays a pivotal role in health interventions (Berenson et al., 1991; Connell & Turner, 1985) and others have indicated that it is the implementation of an intervention rather than program design that influences the failure of some health interventions (e.g., Smith, McCormick, Steckler, & McLeroy, 1993; Tortu & Botvin, 1989), the definition of RT-HPE used for this chapter eliminated many potential health education studies that might have otherwise been included. It appears that teaching methods taught to students in health education teacher education programs are those that have been successfully employed in other academic domains including physical education. Without empirical evidence to support those behaviors and perspectives in the health education domain, however, there remains a gaping hole in health educators preparing future health education pro-fessionals. It should be noted, however, that health education research, in general, is

extremely robust and researchers in this area have provided significant contributions to addressing health related concerns worldwide.

Finally, this chapter would not be complete without acknowledging the fact that RT-HPE is still a young endeavor. Yes, the professional areas have existed for many decades or longer, but questioning and truly understanding the teaching-learning process to any meaningful degree as a profession is only at the dawn of its time. Although this chapter only briefly highlights contributions from a few significant areas of research within this domain, RT-HPE is growing and developing and will continue to make many more positive contributions to teaching of and learning among HPE students.

Biographical Note

John R. Todorovich is an associate professor and chair of the Department of Health, Leisure, and Exercise Science at the University of West Florida, Pensacola, Florida. Dr. Todorovich earned his doctorate in health and human performance studies from the University of Alabama in 1999 and was a faculty member at the University of Wyoming and the University of Florida prior to his current position. His research interests include the investigation of student motivation and the influence of manipulated motivational climates on student and athlete performance. When he is not working, Dr. Todorovich enjoys spending time with his wife and two children at their home in Milton, Florida.

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Section 11

GREAT DEBATES ABOUT TEACHERS AND TEACHING

KEEPING TRACK OR GETTING OFFTRACK: ISSUES IN THE TRACKING OF STUDENTS¹

Lynn M. Mulkey, Sophia Catsambis, Lala Carr Steelman, and Melanie Hanes-Ramos

The General Debate

Tracking is a generic term that covers ways that most educators keep track of students' academic progress by matriculating them into curricula of varying difficulty. Contests over tracking's practical and theoretical viability – getting offtrack – concern what Oakes (1985) asks about whether tracking makes most children smart or only some smart children smarter? In other words, does the school fairly advance students on the basis of their merits or does it reproduce the inequalities they bring with them at the starting gate (Argys, Rees, & Brewer, 1996; Cohen & Lotan, 1997; Oakes, 1985, 1994; Oakes, Gamoran, & Page, 1992; Slavin, 1987, 1990a, 1990b; Wheelock, 1992)?

While clearly tracking may be a well-intended practice for organizing instruction, international and cross-cultural research fails to support the belief that it improves academic achievement and the debate remains unresolved (Ansalone, 2003; Resh, 1998). In a study of thirty countries the official rationale for tracking is largely based on student ability and not to ascriptive characteristics (Marks, 2005). Other evidence from Palestinian Arab High Schools points to an ongoing disagreement over social stratification within the school remaining largely obscure and requiring further research attention to unravel the tangled threads of the issue (Mazawi, 1998).

The debate over ability grouping roils in Scotland as well, where the validity of the practice is explored for both academic and vocational tracks. Raffe (1993) found evidence in favor of a unified, as opposed to the existing multitrack systems with separate academic and vocational courses and qualifications. A comparative analysis of the United States, Germany and Japan on tracking in public, K-12 school systems conveys additional information on the status of the debate internationally. Analyses of respondent perceptions about differentiation in placement showed that nation-specific values and attitudes influence which forms of curricular differentiation are supported. The researchers note that in all industrialized nations students encounter curricular differentiation and that this sorting or "tracking," appears to have a negative effect on students' educational careers. They suggest that researchers on

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching, 1081–1099.* © Springer Science+Business Media LLC 2009 tracking develop a cross-cultural program to study the structure, mobility and effects of tracking (LeTendre, Hofer, & Shimizu, 2003). More documentation confirming the significance of the debate in other countries can be found as early as 1969 when Ogletree published the article "Homogeneous Ability Grouping–British Style." He explained that the sorting out process or "streaming," evolved over the past half century as a means of accomplishing more efficient teaching and had spread to the majority of primary schools in England, Wales and Scotland. The appearance of the Plowden Report recommending, "unstreaming" was the beginning of the tracking debate in Great Britain (Ogletree, 1969).

In practice, whether accurate or distorted, the institution of education, especially in America, is often portrayed as the "great equalizer" meaning that any child with the will to do so has a shot at collegiate prospects and a successful career (Rosenbaum, 1976). Still the nature of educational systems troubles policy makers and the public-at-large because schools have not been able to overcome the disadvantages that many young children carry with them upon entering the system (Coleman et al., 1966). Tracking may exacerbate existing differences in students according to their gender, race, and social class (Gamoran, 1987; Gamoran & Lucas, 2002). In the United States, tracking is entrenched in the majority of elementary schools as early as kindergarten (Mulkey, Catsambis, Steelman, Koch, & Buttaro, 2006) and continues in one form or another, through high school (Lucas, 1999). Yet, surprisingly little is known about whether or not it actually works as well as its backers would claim. Tracking's effects are equivocal. They are too variable to reach strictly one conclusion (Gamoran, 1992) and some of its advocates of getting back on track, contend its opponents must prove doing away with tracking is a better option (Loveless, 1998).

Theoretically, tracking is part of a larger debate amongst scholars devoted to the study of social stratification (Alexander, Cook and McDill, 1978; Alexander & McDill, 1976). Two broad interpretations, consensus versus conflict, contest whether or not modern systems of social stratification depart from previous ascriptive systems and now base allocation of positions and rewards on merit rather than privilege Some consensus theorists have looked at the institution of education to identify mechanisms that promote meritocracy. Scholars such as Parsons (1959) single out school tracking as one such mechanism. Tracking in the form of homogenous grouping results in curriculum differentiation, which is a prominent feature of a meritocratic system of social stratification in that it prepares people to occupy different positions on the basis of their motivation and abilities (Parsons, 1959). This is viewed as the most functional and efficient way to encourage the talents of all students. Under this view high achieving children deserve to be and should be placed ahead of their less deserving counterparts to optimize their talents. Lower achieving students also benefit by tracking because they receive a less demanding academic program that they can absorb rather than being overwhelmed by subjects that may be too demanding for them.

By contrast the conflict view takes issue with this reasoning and envisions the school system as falling back on "merit" as a smokescreen to justify the replication of the status quo across generations by making sure the populace takes for granted that the system provides equal opportunity (Bowles & Gintis, 1976; Collins 1979). How?

Children of privilege start off ahead of their counterparts. Conflict proponents would be especially skeptical of early differential placement of young children because such arrangements would make it difficult, if not impossible, for disadvantaged children to ever get ahead. If such is the case, then tracking is introduced slowly and then becomes a prevalent means of stratification.

The chapter, here, tackles the unsettled debate over tracking's practical and theoretical significance. It does so by providing readers with a comprehensive overview of information and issues that have ensued related to tracking's complex character. It considers:

- What is tracking?
- Are there alternatives to tracking?
- What are the specific controversies concerning tracking?
- Does the evidence inform the controversies?
- What are the limitations in research on tracking?
- What can we conclude about the future of tracking?

What Is Tracking?

An effort to describe tracking entails consideration of the rationale for its use, the forms it takes, the context that influences its use, and the placement of students into tracks.

Reasons for Grouping Students

Schools assemble students for instruction in diverse, complex, and dynamic ways (Oakes, 1992; Hallinan, 1988). The segregation of students into groups, classes or entire schools divides students for instruction on the basis of tested or assessed potential. The reasoning behind customizing curriculum along the lines of academic promise of students is that young people learn at different rates. Corresponding to this logic, students with high academic potential require more challenging work while those with lower level skills may have trouble keeping up with advanced instruction. The benefit of dividing students into homogeneous ability groups accrues in two ways. Teachers can more efficaciously teach fewer students in smaller groups and tailor instruction to fit the aptitudes and preparedness of a smaller number of children. Benefits presumably outweigh costs, thus accounting for the widespread deployment of ability grouping (Hallinan & Sorensen, 1983). Whether the rationale for differentiation is correct or fair to students remains, however, a matter of contentious argument.

Forms of Tracking

Oakes (1992) uses the term tracking to embody many types of ability-related grouping practices. It differentiates students' learning opportunities and potentially results in distinct educational paths or "tracks." These include: (a) placement of elementary students in ability-based groups within classes for selected subjects or in selfcontained ability-homogeneous classrooms; (b) assignment of middle or junior high school students class by class according to their ability or scheduling them together for blocks of classes according to a general ability measure; and (c) establishment of double-layered senior high schools wherein students follow curricular trajectories intended to prepare them for different postsecondary designations as they enroll to correspondingly different levels of academic courses (Oakes, 1985; Slavin, 1987, 1990a, 1990b).

In particular, when children enter middle schools or high schools they are likely to experience other forms of tracking. Before the US Supreme Court ruling of Hobson v Hansen (Inger, 1967) decreed that the practice of putting students into college preparatory classes compared to vocational ones, might be discriminatory, secondary school tracking generally meant that US secondary schools split students deemed as college contenders from their presumed noncompetitive counterparts. Then these students took a prescribed sequence of courses that either set them on the path to college or elsewhere. Now the concept of tracking in US secondary education covers a wide berth of possibilities including but not limited to homogeneous and heterogeneous ability groups, advanced classes, remedial classes, Advanced Placement and college equivalency programs. The totality of a student's portfolio may determine his/her access to college, especially to elite institutions (Dauber, Alexander, & Entwisle, 1996; Lucas 1999). Perhaps unintentionally, however, the Hobson v Hansen ruling may actually foster other forms of segregation such as propelling girls into advanced language arts classes and boys into advanced mathematics and science, arenas believed to be gendered with respect to talents. Indeed the newer forms of differentiation are intricate and not as transparent to detect. Researchers still need to ferret out all of the many ways that students can be grouped by their presumed or demonstrated talents.

Researchers have not yet conducted extensive investigations of forms of tracking across countries (Bracey, 2003). Some broad cross-national patterns indicate that while the most extensive grouping occurs in American schools in the elementary years, in Germany, a highly tracked system begins after the fourth grade. In Japan, tracking is postponed until tenth grade. Bracey (2003) cites research that distinguishes five types of differentiation that can be considered forms of tracking used across countries. They include type of school, course of study, streaming, ability grouping, and geographical location. Tracking students through varying types of schools refers to the differentiation of secondary education into vocational and academic high schools, with the former being more prevalent in Germany and Japan, than in the US. Course of study refers to groups of students who study different topics with differences consistent across a country. Streaming refers to students selecting between college-preparatory, general education or vocational tracks within the same school.

Ability grouping refers to making varied curricula available to students of different abilities. It is widely found in the US but is not found at all in Japan until tenth grade. School location may constitute a form of tracking in countries with a low degree of educational standardization, such as the US, where funding and curricular decisions are made at the local level. In such countries, the quality of education offered to students differs by geographical locale. In highly standardized systems, such as Japan and Germany, where the quality of education meets the same standards nationwide (Allmendinger, 1989), tracking is more consistent across schools. Standardization and transparency may inspire more confidence on the fairness of the tracking system in these countries than in the localized system of the US (Bracey, 2003).

Uses of Tracking

Only sparse research exists on the ways by which various tracking practices are used as well as the roles they play within schools' organizational structures. Recent evidence though from US elementary schools and their students points to the importance of conducting further research in this area. Nationally representative data show that US schools track students by using various form of grouping practices as early as kindergarten (Mulkey, Catsambis, Steelman, & Koch, 2008; Tach & Farkas, 2003). These forms of grouping practices are hierarchically nested so that students may experience a constellation of grouping configurations which may include segregation into highly selective schools, grouping into classrooms of different achievement levels, attending gifted and talented or pull-out programs for additional instruction, and grouping within classrooms for reading and mathematics instruction (Steelman, Koch, Catsambis, & Mulkey, 2007). Within-class ability grouping remains at the center of this constellation of grouping practices, with two-thirds of students being so grouped for reading instruction upon entry to kindergarten (Mulkey et al., 2008; Tach & Farkas, 2003). The widespread prevalence of within-class grouping in the US may result from organizational policy or culture rather than from individual teacher decisions (Barr & Dreeben, 1983; Dreeben & Barr, 1988; Mulkey et al., 2008). This form of grouping may be an organizational response to optimizing resources and addressing student needs. Schools most likely to use within-class ability grouping as early as kindergarten are those serving high proportions of disadvantaged students and students with low, or highly varied reading skills. Schools may also use other forms of grouping, such as pull-out instruction and mixed achievement groups interchangeably with within-class homogeneous groups (Steelman, Koch, Catsambis & Mulkey, 2007). Further research is needed to examine the various grouping configurations existing in both elementary and secondary education, as well as the effects of grouping configurations on student outcomes.

Are There Alternatives to Tracking?

A number of US schools and school districts have sought to detrack their students by introducing various alternatives to traditional grouping practices. These include heterogeneous grouping, flexible grouping such as temporary groups, preteaching methods to help students grasp a concept or skill, having double periods for particular subjects, and after-school programs (Cohen & Lotan, 1997; Rubin, 2006; Wheelock, 1992). Detracking strategies are highly varied, with some efforts resulting in the complete elimination of ability grouping in all subject areas throughout an entire school district. Others create practices that do not directly affect a school's track structure, such as creating increased access to high-track classes for students formerly in lower tracks. There are some large-scale examples of detracking and smaller-scale efforts limited to particular subject areas such as language arts and social studies. Still, others implement detracking at a specific grade level or one subject at a particular grade level (Rubin, 2006). At certain schools, detracking may be governed by students who freely self-select into higher levels if they so choose. Or in other schools, students may choose to participate in college preparatory courses and are provided with academic and social support.

Although some schools proclaim that they do not track, scholars are concerned that there may be subtle, hard to measure, ways that they really do. Rubin (2006) contends the wide range of reforms subsumed under the rubric of detracking, leads to a conundrum for determining the extent of its use and its effectiveness. Thus, it has been difficult to make a comprehensive assessment of a reform that has been implemented in such a variety of ways (Rubin, 2006). Moreover, although there have been some successful initiatives to "detrack" schools in the US (Cohen & Lotan, 1997; Oakes, Gamoran, & Page, 1992), such efforts are often faced with resistance. "Detracking" that dismantles educational pathways that ease the transition to college or endow some children with more competitive profiles than others is bound to meet stiff resistance. The privileged parents are more likely to advocate the continuation of curriculum that favors their own children. Clamoring for change most likely originates from less advantaged parents. One can easily see the links between educational trajectories and their implications for social mobility.

What Are the Specific Controversies Surrounding Tracking?

Scholars bring differing concerns into the debate of whether tracking provides educational opportunities or perpetuates academic and social inequality. Some focus on its strengths in relation to its weaknesses while others urge that tracking be dismantled completely. Some say the problems with tracking can be fixed and that differentiation should continue. One of the biggest contentions about tracking is the placement of students into ability groups and whether or not such placements exacerbate social class, gender and racial disparities that eventually lead to different learning opportunities, educational achievement, and educational attainment (Kibutschek & Hallinan, 1996). Others are concerned with the instructional benefits of tracking, maintaining that tracking is not an effective instructional practice or that it helps only those students in the high tracks. Proponents of tracking contend that its instructional benefits outweigh the downside of the process (Hallinan, 1994). The debate over the instructional advantages of tracking has led to a substantial body of research that has yet to provide unequivocal results. Still others are less concerned directly with whether students learn and are more troubled with tracking's social psychological effects, which in turn may alter students' achievements. These contenders are troubled with the influence tracking may have on students' aspirations and academic self-concept (Oakes, 1994). The gravest concern of the social psychological effects of tracking is with whether lower track students are affected by the negative stigma and by the lower expectations that teachers will have of them (National Education Association, 1990). Herbert Marsh (1984) is particularly leery of the potentially adverse social psychological effects of ability grouping that operate through the mechanisms of social comparison. He proposes a theory he refers to as the "big fish, little pond theory." Under his reasoning students develop their academic self-concept comparing their performance to relative others in high or low achievement groups. The domains of contention discussed here have resulted in the production of discreet and sizeable literatures.

Does the Evidence Inform the Controversies?

We have noted that researchers are divided in their emphases regarding the role of tracking in producing educational versus social inequalities. A large proportion of scholars concerned with social inequalities related to tracking focus on issues of track placement (Kibutschek & Hallinan, 1996). The most controversial issue here pertains to the potential harmful effects of a bad placement decision based on nonacademic criteria, such as, as low parental income, race, ethnicity, gender, and special needs (Oakes, 1985). So far research findings pertaining to inequalities in the placement of students into ability groups shows that students placed into high and low groups do not only differ in terms of achievement, but also in terms of individual traits such as parental socioeconomic status, race/ethnicity, gender and selfconfidence and previous group placement. Students' placement into high, average or low groups also varies from school to school, depending on institutional factors such as the social composition of students in classrooms and schools (Dreeben & Barr, 1988; Mulkey et al., 2008; Dreeben & Barr, 1983; Mulkey et al., 2008; Oakes, 1990; Pallas, Entwisle, Alexander, & Weinstein, 1990; Sorensen & Hallinan, 1983; Tach & Farkas, 2003). Analyses of recent national data in the US reveal that gender along with race/ethnicity and socioeconomic status differences correspond to reading group placement in kindergarten and first grade in ways that favor whites, upper social class students and females (Mulkey et al., 2008; Tach & Farkas, 2003). While reading test scores explained differences in kindergarten group placement by socioeconomic status and race/ethnicity, gender differences were explained by teachers' lower evaluations of males' reading skills and readiness to learn (Mulkey et al., 2008). Females' advantage in group placement is also found in US middle grades, where a higher proportion of females are enrolled in high ability mathematics classes than males with similar test scores. The reasons for this female advantage middle school tracking have yet to be investigated.

Parental intervention may also affect students' group placement in a manner that reproduces social class inequalities. Research shows not only are middle- and upperclass parents more likely to lobby for their children's placement in more advanced classes but their requests are usually more effective that those of working class parents (Lareau & Horvat, 1999; Useem, 1992). Working class parents may feel less empowered to challenge the school's authority or may be less aware of the consequences of placement than middle-class parents who themselves may have had to navigate the system to optimize their own educational pathways (Hoover-Dempsey, Bassler, & Burow, 1995). Social inequalities related to track placement may have important implications for students' academic achievement and future life chances, especially since once assigned to a lower group, a student usually will not move upward (Kerckhoff & Glennie, 1999; Rosenbaum, 1976, 1980). There are a number of ways by which the placement of students into groups of different achievement levels may influence their cognitive growth:

- (a) The pace of instruction is faster in high than in low achievement groups (Alexander, Cook, & McDill, 1978; Alexander & McDill 1976; Berends, 1995; Gamoran et al., 1995; Rosenbaum, 1980; Schafer & Olexa, 1971; Sewell, Hauser, & Alwin, 1975; Van Fossen, Jones, & Spade, 1987).
- (b) High achievement groups may be taught by superior teachers (Alexander & Cook, 1983; Freidkin & Thomas, 1997; Gamoran, 1992; Gamoran & Mare, 1989; Hallinan & Kubitschek, 1999; Lucas, 1999; Oakes, 1985).
- (c) The classroom climate of low achievement groups is not conducive to instruction or learning because students in these groups behave poorly and disengage from school (Eder, 1981; Hallinan, 1987; Kellam, 1994).
- (d) Teachers are less likely to encourage students in low achievement groups (Gamoran & Berends, 1987; Gamoran, Nystrand, Berends, & LaPore, 1995; Lacey, 1970; Metz, 1978; Oakes, 1985; Oakes, Gamoran, & Page, 1992; Rosenbaum, 1976).
- (e) Placement into a high achievement group may boost students psychologically in their own eyes and in those of their teachers, resulting in higher cognitive growth over the years (Entwisle, Alexander, & Olson, 1997; Freidkin & Thomas, 1997; Lucas & Gamoran, 2002; Kerckhoff & Glennie, 1999).

For nearly a century, researchers have scrutinized the widely held belief that various forms of achievement grouping are effective by making the best of student variation in talent. A voluminous literature of varying quality has been generated, yet even the "best evidence" is inconclusive. Findings with respect to the effectiveness of tracking on students' achievement in primary and secondary education have been published by prominent scholars (Barr & Dreeben, 1983; Hallinan & Sorensen, 1986, 1987; Gamoran & Mare, 1989; Lou, Abrami, & Spence, 1996, 2000; Kulik, 1992; Kulik & Kulik, 1982, 1984; Lucas, 1999, 2001; Pallas et al., 1994; Slavin, 1990a, 1990b;). Slavin's (1987, 1990a,b) seminal best-evidence syntheses cover research on between- and within-class achievement grouping and reveals that the best evidence from randomized and matched equivalent studies supports the positive achievement effects of the use of within-class achievement grouping in mathematics in the upper elementary grades and of cross-grade achievement grouping in reading. In contrast, there is slim support for the practice of assigning students to self-contained classes according to general achievement or performance level. His overview concludes that achievement grouping is maximally effective under the following conditions: (1) when students are only grouped for only one or two subjects, (2) when students remain in heterogeneous classes most of the day, (3) when student heterogeneity in a specific skill is greatly reduced, (4) when group assignments are frequently reassessed, and (5) when teachers vary the level and pace of instruction according to student needs.

In addition to Slavin's research syntheses, other meta-analyses conclude that on the average there is a small positive effect of small-group instruction on student achievement (Kulik & Kulik, 1987; Lou et al., 1996, 2000). Low achievement students perform best in heterogeneous groups; medium achievement students performed best in homogeneous groups, and high achievement students perform well regardless of group type (Lou et al., 1996). Effects of within-class grouping appear more positive for mathematics and science and when assignment to group is based on multiple factors, tests are standardized, testing is tied to the curriculum, and groups are composed of three or four members. Effects of small- group instruction are more positive when teachers were provided with extensive training, cooperative learning is the method of instruction, and whole class instruction relies on traditional frontal teaching. However, not all studies find a positive impact on student achievement and those that do are not that impressive. The problem with the lack of conclusive evidence is even more acute with respect to the instructional effects of detracking practices (Cohen & Lotan, 1997; Rubin, 2006).

Evidence regarding the potential social psychological outcomes of tracking is sparse. Students in low ability groups are reported to have low levels of academic self-concept and little interest in school (Oakes, 1985). Other studies suggest that those placed in high achievement groups may derive psychological benefits that result in higher cognitive growth over the years (Entwisle et al., 1997; Freidkin & Thomas, 1997; Lucas & Gamoran, 2002; Kerckhoff & Glennie, 1999).

Only a few studies investigated the mechanisms through which tracking may impact student's social and academic development. Herbert Marsh theorized that tracking might affect students through the social comparisons that they make between themselves and other students in the same ability group or across groups (Marsh, 1984, 1986; Marsh, Barnes, Cairn, & Tidman, 1984; Marsh, Chessor, Craven, & Roche, 1995; Marsh & Craven, 1997; Marsh & Yeung, 1998). He found students in high achieving groups, such as in gifted and talented programs, to have relative low academic self-concepts. He explained this findings through his "big fish little pond theory": rather than comparing their achievements against all students in their grade, highly talented students make comparisons against their equally or even more talented peers enrolled in the same program. Further analyses on US national data of middle schools investigated whether or not social psychological effects of tracking work uniformly for males and females within the same track placement in English and in mathematics classes (Catsambis, Mulkey, & Crain, 1999, 2001; Mulkey, Steelman, Catsambis, & Crain, 2005). These studies compared students who were similar in social, demographic and achievement related characteristics but differed in whether or not their classes were grouped by ability. Results showed significant differences between students in tracked and untracked classes in terms of attitudes toward English and math, educational aspirations, self esteem and locus of control. The differences were variable according to students' gender and the subject matter of the class. The researchers theorized that these variable effects of tracking might be produced, in part, through the mechanism of social comparison conceptualized by Marsh (1984). The results of tracking in mathematics suggested that despite the "reflected glory" of being in a high ability track, when males are grouped with peers of similar high ability in a subject area that defines their competence, they seem to lose their competitive edge. Low ability males are positively affected through the mechanism of comparing with their peers because the competition to do well is relatively less keen than in high tracks (Catsambis et al., 2001). Female students were more affected by their placement in English classes, but their social psychological makeup received a boost by placement in a high ability English class, suggesting that females choose a different group for making social comparisons (Catsambis et al., 1999). Further results showed that the long-term instructional benefits of tracking for academic attainment were somewhat dampened by the aftermath of its social psychological effects. High-achieving students who were tracked in middle-school mathematics classes suffered considerable losses in self-concept that subsequently depressed their mathematics achievement and course-taking through the twelfth grade (Mulkey et al., 2005). While these studies are suggestive, further research is needed to elucidate the complex ways by which tracking impacts student's social and academic development.

What Are the Limitations in Research on Tracking?

We discuss a number of conceptual and methodological gaps in the above research literatures that render existing findings inadequate for drawing conclusions regarding the effectiveness of tracking as an instructional practice. They refer to issues pertaining to: theoretical concerns; producing consistent evidence; reliance on data from surveys versus randomized experiments; establishing appropriate comparison groups; addressing selection bias in estimating tracking effects; and developing appropriate models of achievement growth.

Theoretical/Conceptual Concerns

Theorizing about instructional grouping and other determinants of student academic achievement of students from various backgrounds remains at a relatively low level (Hallinan, 1996a,b). Much of the work is applied in nature, lacking the sufficient theoretical underpinnings to guide the choice of questions, variables and analytical models. Consequently, the primary need in this area of research has been to develop conceptual models of how schools work that incorporate tracking within the wider organizational context of schools, as well as conceptual models of student learning and development that incorporate achievement grouping.

The nature and effects of achievement grouping will be fully appreciated only when the wider organizational context of the schools are taken into account (Dreeben and Barr, 1988; Hallinan and Sorensen, 1983, 1986). Structural and compositional factors at both the school and classroom level pose restrictions on grouping practices. Decisions made at an organizational level higher than the classroom, such as, the school's size and funding levels, the number of teachers hired and the forms of achievement grouping employed in the school can affect the use and effectiveness of instructional practices within the classroom (Dreeben & Barr 1988). Current research

based on US national data exemplifies the utility of a contextual approach to understanding tracking practices such as within-class ability grouping. While typically, group placement is considered an outcome of a child's individual merits, these data show that placement in kindergarten reading groups depends also on the school that a child attends. A number of school organizational characteristics are associated with students' placement in reading groups of various achievement levels (school location, school sector, school leadership, levels of students' reading skills and socioeconomic composition of the student body) (Catsambis, Buttaro, Mulkey, Steelman & Koch, 2006). Additionally, the formation of within-class ability groups and students' group placement is also affected by the organizational characteristics of classrooms (Barr and Dreeben, 1983). Teachers rely on the achievement composition of a class to determine the number, size, and discreteness of achievement groups. Thus, since there are strong differences in the extent to which schools and classrooms provide programs to students that are commensurate with their academic potential, the fallout will involve inequality across schools. The above body of evidence underscores the need to further develop organizational theories that can explain the ways by which tracking may contribute to the development of social inequalities. Organizational theories of tracking can be based on the foundations already laid by seminal contributions such as Barr and Dreeben (1983) and Dreeben and Barr (1988).

Pallas, Entwisle, Alexander, and Stulka (1994) have made strides in the theoretical conceptualization of the effects of tracking by putting forward a theory that distinguishes instructional, social and institutional effects. Lastly, Gamoran and Mare (1989) investigate the association between school tracking and educational inequality – compensation, reinforcement, or neutrality. Although this study was conducted with secondary school students, the authors provide a test of models of ascription and merit applicable to the case of homogeneous grouping in all grades. These papers are a baseline for moving forward the theoretical work in the study of tracking. Such theoretical formulations can also aid in addressing some of the major methodological limitations of empirical studies, especially as they pertain to the issue of selection bias discussed below.

Consistent Evidence

Tracking research is plagued with a lack of consistency observed across hundreds of small-sample studies. Even meta-analyses, instructive in consolidating the findings from these small-sample studies, are not definitive. A recent development along these lines, paves the way for advances in how the tracking controversy can be resolved. Notably, the US Early Childhood Longitudinal Survey: 1988 (ECLS-K) monitors the progress of 20,000 children from kindergarten through the fifth grade and offers much needed large-scale longitudinal data on young children. Virtually all previous research on young children relies on studies of one district, one school or one area rather than a representative national study that can produce generalizable results. Now with the unprecedented scope of this survey, students can be monitored students from kindergarten onward allowing for studies of how tracking practices shift over time and whether they affect learning as young students mature. Tach and Farkas

(2003) already used these data and found that within-class grouping in kindergarten and the first grade is associated with cognitive growth in reading in a way that increases the achievement gaps between high and low ability groups. Even though this study did not address many of the limitations of existing research, it paves the way for more systematic analyses using these data.

Survey Research Versus Randomized Trials

As studies from the above-mentioned survey of kindergartners get on they way, they will share limitations of the existing research on secondary education. A large part of tracking research in secondary education has relied on survey data which are almost always observational rather than experimental. Data embodied in most surveys represent systems as they operate in normal practice, making it very difficult to control for confounding factors. Survey data are widely used, however, because they are relatively inexpensive to obtain and represent the full spectrum of variation in grouping practices better than data from randomized experiments. Consequently it is sensible to try to estimate the effects of treatments from survey data, and especially from large data sets. The use of controlled experimental designs in studying tracking can also contribute to the resolution of controversy over the utility of tracking since this is the optimal methodology for establishing causal relationships. With the current national climate in US policy supporting randomized trials for studying best educational practices, it may become easier to conduct such trials.

Establishing Appropriate Comparison Groups

Most existing survey research tends to compare the achievement growth of students in high versus low tracks. However, such comparisons may produce spurious results because students in different ability groups may differ not only in terms of academic performance but also in terms of motivation and potential for cognitive growth, to mention a few possibilities (Slavin, 1990a, 1990b). Researchers often control for these characteristics by using premeasures of student characteristics, when available. An alternative approach that minimizes differences in comparison groups is to compare students who are otherwise similar except that some are grouped and other are not (Catsambis et al. 1999, 2001; Mulkey et al., 2005; Hoffer, 1992; Slavin, 1990a, 1990b).

Selection Bias in Estimating Tracking Effects

Selection bias is one of the most vexing methodological challenges of most research in this area. It is most acute in survey research data and occurs because students' assignment to different group levels may be influenced by factors, other than achievement. These factors include students' motivation, aspirations, socioeconomic status, race and ethnicity (Gamoran & Berends, 1987). Teacher judgments and parents expectations also influence the group placement of students (Gamoran & Berends, 1987; Useem, 1992). Even if comparisons are made between grouped and ungrouped students with similar test scores, achievement differences between students in grouped and ungrouped classrooms may be due to preexisting differences in students' motivation, social background or other characteristics. To address this problem, extensive controls for student, classroom and school characteristics are typically incorporated into multivariate models. The problem however may still persist due to confounding factors that are unmeasured or poorly measured. New statistical techniques such as propensity score matching allow us to draw inferences about the effects of actions, treatments, and interventions when using data from large surveys (Kaplin, 1999; Rubin, 1997) and can advance research on tracking effects.

Modeling Achievement Growth

Most studies employ cross-sectional data in which comparisons are made between students in high and low groups and simply overlook the potential effects of tracking on academic achievement over time. Many of these studies rely on traditional techniques such as Ordinary Least Squares regression models (OLS) that tend to miscalculate the effects of tracking practices (Kibutschek & Hallinan, 1996). Moreover, due to potential problems of colinearity among predictors of track placement and achievement growth, effect sizes may vary substantially as researchers add or remove other factors from a model. Advances in achievement growth modeling (Bryk & Raudenbush, 1992) coupled with the availability of longitudinal data are promising new developments for studying the effects of tracking practices on students' academic development. With respect to the need for a contextual approach to the study of tracking, hierarchical linear models (HLM) make it possible to study the extensive, multifaceted, and multi-level structure of schools to get a more accurate picture of the extent to which students are differentiated for instruction (Raudenbush, 2001; Raudenbush & Byrk, 2002). Given the variety of ways in which students may be selected into programs or elect to take specific courses, HLM modeling allows researchers to explore with much greater accuracy nested data that characterizes contemporary schools. Multilevel growth models can treat students' repeated test scores as nested within individual students, who then nest within classrooms and/or schools (Leahey & Guo, 2001).

Strengthening these weak areas of research on tracking are clearly important if we are to avoid "getting offtrack." By identifying weaknesses and by drawing on newfound resources, we are perhaps within reach of conclusive evidence on whether or not tracking works.

Summary and What Can We Conclude About the Future of Tracking?

As Cohen and Lotan (1997) discuss, an instructional approach that is both doable and fair for all children is a difficult endeavor. ... In this chapter, we have examined what we know both in theory and in practice about school tracking's capacity to equalize

opportunities for children of different backgrounds. That is, we address the question, does tracking advance students on the basis of their merits or simply duplicate the inequalities of their family backgrounds? We followed the debate by investigating inequalities in the placement of students for instruction and whether tracking's instructional advantages outweigh its other detriments. Then we discussed the social psychological outcomes of tracking. Results of our queries are inconclusive with proponents of detracking having an even more onerous task of proving their position.

In sum, we asked what tracking is, what alternatives exist to this instructional practice, what is its viability, what are the limitations of tracking research, and what can we conclude about the status of tracking? We discussed the rationale for its use, the forms it takes, the school organizational context that influences its use, and the placement of students into tracks. Tracking divides students for instruction on the basis of tested or assessed potential and is found in various forms ranging from ability grouping within classes in elementary schools to between class grouping in junior high school and curricular differentiation in high school. Varied forms of homogeneous ability grouping appear in all developed countries and tracking is variously employed depending on the characteristics of the school in which it is embedded. Critics of tracking advocate detracking with the major issues surrounding tracking's implementation threefold: the fair assignment of students into high and low ability groups; the instructional benefit of tracking, and the social psychological injuries or benefits of tracking. Results are mixed; however, inequalities in assignment to ability groups are well-documented with consequences for the pace of instruction, quality of instruction, poor classroom climate, lack of teacher encouragement, and labeling. Evidence of tracking's effectiveness in fostering learning is tentative, with some agreement over a positive, persistent, nevertheless small effect of within-class ability grouping on student achievement. Research findings also lend some support to the idea that tracking produces its effects, in part, through social psychological mechanisms such as social comparison. The tracking debate continues to rage due to limitations in research such as the atheoretical nature of tracking research, inconsistent evidence, the absence of randomized experiments and appropriate comparison groups, selection bias in estimating tracking effects, and a paucity of appropriate models for the study of achievement growth. Conscientious attention to these pitfalls has spawned new data and methodological resources that in turn may facilitate closure of the debate.

We conclude by reiterating what Adam Gamoran (1992) proclaimed, that tracking's effects are variable and that grouping for instruction is an extensive and complicated process that needs to be understood as part of a broad and hierarchical organizational context (Gamoran et al., 1995). Advancement and refinement of statistical techniques and the availability of longitudinal national data make possible and bolster tracking research from an organizational perspective. To understand the effects of schools on individual students, scholars must employ analytical strategies that incorporate student-level variables in addition to school organizational variables (Kreft, 1993). In other words, dissolution of the tracking debate may ultimately rest with shifting the research lens from the details to the bigger picture.

Biographical Notes

Lynn Mulkey received her Ph.D. from Columbia University, NY. She is a nationally recognized scholar who specializes in sociology with an emphasis in educational inequality/stratification. She and her colleagues recently obtained a \$413K grant from the National Institutes of Health to investigate the status of school tracking in the United States, and the renewal award of an additional \$696K awaiting disbursement in October. She was formerly a Fellow of the National Institute of Mental Health at the University of California at Los Angeles, in the Sociology Department, where she received postdoctoral certification in evaluation research (mental health service delivery systems). She has also had extensive experience as an evaluation research associate for the New York City Public Schools where she conducted assessments of the federally-funded Chap. 1 programs implemented to improve the reading and mathematics performance of a large proportion of New York City's nearly one million students. She has produced approximately fifty reports for accountability purposes. Most recently, she is the recipient of the University of South Carolina's Trustee Professorship for outstanding contributions to research, teaching, and community outreach. She is on the Graduate Faculties at the University of South Carolina - Columbia, chairs the University of South Carolina - Beaufort's Department of Social Sciences and coordinates its Human Services Program.

Sophia Catsambis is Professor of Sociology at Queens College, and the Graduate Center, City University of New York, where she teaches courses in Sociology of Education and quantitative research methods. Her research agenda aims to expand knowledge on equity in educational opportunities through the analysis of major longitudinal survey data. Her work focuses on issues that include gender and racial/ethnic differences in mathematics and science, the effects of school tracking and ability grouping, the effects of parental involvement on children's secondary education as well as the interrelationships of family, neighborhood, and school as they relate to educational opportunities of at-risk children. Her current work, in collaboration with Lynn Mulkey and Lala Steelman, uses US national data from the Early Childhood Longitudinal Survey (ECLS-K) to map uses and effects of various ability grouping practices in the early grades.

Lala Carr Steelman is a full professor at the University of South Carolina, Columbia. Her main scholarly interests involved the family and educational outcomes from a social psychological vantage point. She has published over forty articles in peerreviewed journals including the American Sociological Review, the American Journal of Sociology, and Social Forces. She has been awarded several grants from the National Science Foundation and the National Institutes of Child Health and Development to study ability grouping (with Lynn Mulkey and Sophia Catsambis). With Pamela Ray Koch she currently is studying the veracity of the culture war hypothesis of political voting in the United States.

Melanie L. Hanes-Ramos, Assistant Professor Librarian, received her Masters in Library and Information Science, (MLIS), from University of South Carolina –

Columbia in 2001. She is currently Interim Director of Libraries at University of South Carolina – Beaufort. She provides expert bibliographic skills for university research including this current project on tracking issues.

Note

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HIGH STAKES TESTING AND TEACHING TO THE TEST

Gary Natriello

Introduction

Perhaps no single educational policy change over the past fifty years has had as great an impact on the work lives of teachers in public schools in the United States and other developed nations as the movement to impose high stakes testing requirements. High stakes testing refers to the use of standardized student achievement tests as a primary mechanism to evaluate the performance of students, their teachers, and their schools. High stakes testing policies have long existed for special purposes such as admission to elite educational institutions, but such policies have spread in recent years to encompass greater proportions of the student population.

In the United States the spread of high stakes testing to encompass more students was part of the school reform movement designed to improve the quality of education by raising standards for student performance (Darling-Hammond, 2004; McNeil, 2000; Orfield & Kornhaber, 2001). High stakes testing policies began at the state level with a majority of states implementing some type of high stakes testing program. The spread of high stakes testing has been most recently spurred by federal legislation that requires all students, with few exceptions, to be tested as evidence of their accomplishments and those of their teachers and schools (Goertz & Duffy, 2003). Other developed nations appear to be moving in the same direction as testing programs increasingly involve more students and drive more important decisions regarding their educational careers.

High Stakes Testing as an Element of Changing Education Sector Governance

It is important to recognize that high stakes testing programs are not isolated policy initiatives within the education sector. Rather, they are an element of a broader set of new approaches to the management of educational systems.

The introduction of high stakes testing policies embodies a number of important changes from earlier efforts to manage the conduct and performance of actors in the

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching*, 1101–1111. © Springer Science+Business Media LLC 2009 educational system (Fuhrman & Elmore, 2004). First, high stakes testing represents a shift from the monitoring of inputs and processes to the monitoring of outcomes in the form of student scores on standardized tests. This change can be viewed as a logical next step in the development of educational systems that are fully developed in terms of enrolling most of the eligible students. When educational systems are engaged in expanding enrollment primary attention is devoted to building-out the system and its various capacities such as facilities and staffing to meet the demands of the student population. Once educational systems are fully developed attention can be directed to outcomes.

A second change heralded by high stakes testing is increased interest in student performance, not just attendance and completion (Ladd, 1996). It is no longer enough for students to participate in schooling and ideally complete a sequence of studies; it is now important that students exhibit a level of performance on standardized tests indicative of a certain degree of learning. The emphasis on student levels of performance is part of the standards movement that initially grew out of debate among policy makers and educators in the 1970s. This movement for higher standards developed in reaction to concerns that the educational system had neglected standards of performance and produced graduates deemed lacking in certain respects.

The effort to link public standardized measures of performance to individual students and their teachers is a third major change associated with high stakes testing. Although public schools had long been organized to assess and document the performance of individual students, many of the activities in this area had been left to individual schools and teachers with the result that the assessments had varied widely for the same or similar levels of student performance. High stakes testing policies were designed to bring the same assessment processes to bear on students, teachers, and schools throughout the system. The idea that schools should be judged by a common yardstick is a departure from past practices in the United States where the highly local governance structures for public schools had resulted in local standards and shielded students, teachers, schools, and communities from external standards from state, national, and global sources (Carr, Dogan, Tirre, & Walton, 2007).

Fourth, the growing emphasis on high stakes testing for all is driven by an emerging desire among policy makers, particularly in the US but increasingly around the world as well, to ensure that all students are educated to a certain level identified and mandated by the state. In the US this movement is represented most visibly by the No Child Left Behind Act which is designed to hold schools accountable for the achievement of all students (Sunderman & Kim, 2007). It is this concern with all members of the student population that drives high stakes testing policies to include all students (or as many as reasonably feasible) in the tested group.

Including the complete population of students in the testing program allows for a fifth change in management of the educational system, that is, the examination of the performance of groups and subgroups as in particular school districts or schools, or particular racial and ethnic groups, or other segments of the schooled population (Wenning, Herdman, Smith, McMahon, & Washington, 2003). This change is something welcomed both by policy makers interested in assessing the performance of the educational system as well as by advocates for students from historically poorly served groups. Finally, the introduction of high stakes testing policies reinforces the trend visible in schools and other sectors in modern societies of greater reliance on data and rational decision making processes to drive government and managerial action (Moss & Piety, 2007). The student performance data generated by high stakes testing programs forms the key element in rational examinations of the operation of the educational system and its various elements.

High Stakes for Students

High stakes testing programs carry important consequences. The so-called "high stakes" refer to decisions that affect the lives of students and/or teachers and administrators in substantial ways. High stakes for students can take a number of forms at different stages of a student's school career (Heubert & Hauser, 1999).

Standardized test results can be used to determine if students are assigned to remediation services. Such services can include in-school pull-out programs where students are assigned to specialist teachers, after-school programs that provide additional instruction during the school year, and summer school programs that offer instruction when regular school is not in session (Starrett, 2003).

The results of standardized tests can also be used to make decisions regarding student promotion or retention (Valencia & Villareal, 2003). Advocates of grade retention on the basis of test scores argue that students who repeat a grade will have an opportunity to acquire the knowledge they had previously not obtained. Those opposed to automatic grade retention based on test scores question whether repeating a previously unproductive experience will result in better outcomes, and argue that gains, if any, are likely to be transitory while the act of retention reduces student self-esteem and increases the likelihood that students will drop out of school prior to high school graduation. Of course, assignment decisions can involve more than just grade levels as students can be assigned to particular curriculum programs in situations where there are different programs and even to particular schools in systems where different schools represent different curricular programs with different degrees of difficulty.

Standardized testing can also be utilized for a range of continuation decisions governing the educational careers of students. In some nations test results can be used to select students completing one level of education to continue to the next level when the capacity of subsequent levels is smaller. In such cases, test results are employed as part of a process of rationing education. In some developing nations test results are used to determine continuation onto secondary level education, in developed nations, test results are used to determine continuation onto tertiary or higher education (Zwick, 2002). Beyond direct decisions about admitting students to further education, the results of standardized tests are used to award students scholarships to cover the costs of education, and such funds then determine whether students from families of limited means can, in fact, continue their schooling.

High stakes test results can also be tied to high school graduation with students scoring below a certain level denied a diploma or forced to secure one through an alternate evaluation path. In such cases the test results are used to certify a certain level of accomplishment connected to the diploma (Jacob, 2001).

High stakes for students mean that some important action will result from a score on a standardized test. The idea is that students will take the test seriously because their performance will have real meaning in their lives. High stakes programs and policies can include options that allow students to subvert or work around the implications of their test performance, but such options are kept rare to maintain the impact of the program.

High Stakes for Teachers, Administrators, Schools and School Districts

In addition to their impact on students, high stakes testing programs can carry very meaningful effects for teachers, administrators, schools, and school districts. These effects vary with the nature of the program and the governance structures that characterize the educational system (Barksdale-Ladd & Thomas, 2000).

For teachers the consequences of the performance of their students on high stakes standardized tests can affect their careers in several ways (Madaus, 1988). Student test results can be incorporated into evaluations of teacher performance. In addition, to the performance rating assigned to the teacher, the evaluation can be used to determine teacher compensation in systems where teacher salaries are subject to merit pay provisions. Even more substantially, teacher evaluations including student performance on standardized tests can be used to drive decisions about retaining or dismissing teachers from employment. Less formally, of course, teachers' assignments can be affected by student performance on standardized tests. At the elementary level a change in assignment can include a move to another grade level where standardized tests are not given while at the secondary level a change in assignment can involve a move to teaching a subject for which there are no high stakes tests.

Much like teachers, school administrators can be subject to actions resulting from high stakes testing programs (Thompson, Blackmore, Sachs, & Tregenza, 2003). Administrators can be evaluated on the basis of the performance of the students in their schools on high stakes tests, and those evaluations can be tied to salary under merit pay conditions as well as retention or dismissal from an administrative position.

Beyond individuals, high school testing programs and policies can also result in serious consequences for entire schools. Schools as institutions can be judged on the basis of the performance of their student bodies on high stakes tests. Schools where the student body performs well on a high stakes test can be deemed successful, and rewards such as bonus pay can be distributed to the entire staff. Schools where the student body performs at an unacceptable level on a high stakes test can be put on probation and warned to improve. Failure to improve the test scores of students in the school can result in disbanding or closing of the school and reassignment of the staff (Goertz & Duffy, 2003). In such cases new schools can be developed to replace those that have failed to position their students to achieve an acceptable level on the high stakes test.

Serious consequences of the kinds already highlighted for teachers, administrators, and individual schools can also beset entire school districts or systems. Local school

districts where the students achieve at acceptable levels on high stakes tests are permitted to continue operations with regular oversight from higher regulatory agencies, in the US context, a state level department of education. However, in cases where the students in a district fail repeatedly to achieve at acceptable levels on high stakes tests, the local district can be subject to a state takeover in which the state education agency suspends the local board of education and assumes managerial responsibility for the district. The district is then managed by state monitors and a state-appointed leader until student performance is improved (Wong & Shen, 2003).

The Effects of High Stakes Testing

Although the intent of high stakes testing programs and policies are clearly articulated and shared by proponents and supporters, there is less consensus as to the actual effects of these programs in operation. Investigations into the effects of high stakes testing have revealed mixed results and diverse interpretations of the same results by proponents and opponents (Amrein-Beardsley & Berliner, 2003; Amrein & Berliner, 2002b; Raymond & Hanushek, 2003; Rosenshine, 2003). Nevertheless, it is possible to delineate the range of possible effects on students, educators, the educational system, and the changing role of governments in the educational sector. The entire range of effects is reviewed first as a prelude to more detailed consideration of what has been labeled "teaching to the test" by both proponents and critics alike.

The primary intended outcome of high stakes testing programs is improved student achievement as measured by the tests. The underlying rationale is that both students and the educational system will be motivated to focus effort on the areas of knowledge covered on the tests and such effort will lead to higher achievement. Proponents of high stakes testing have pointed to specific instances of increased test scores as evidence that such policies are having the desired effect (Roderick, Jacob, & Bryk, 2002), while critics argue that analyses of changes in test results over time are subject to testing artifacts, shifts in the population being tested, and other factors that prevent a clear conclusion that achievement is, in fact, improving.

Critics of high stakes testing policies have concentrated much of their attention on effects other than those directly related to achievement (Heubert & Hauser, 1999; Natriello & Pallas, 2001). These effects include the possibility of student disengagement from school and decreased motivation to expend the effort necessary to succeed in the face of the threat perceived to be presented by the standardized tests. One particular student behavior argued to result from the introduction of high stakes testing is dropping out of school prior to graduation. Critics suggest that when students perceive another barrier to their successful completion of their education, they may decide to leave school (Beatty, Neisser, Trent, & Heubert, 2001).

Another unintended effect of high stakes testing is student cheating (Grant, 2001; Suen & Yu, 2006). Students have devised any number of strategies for achieving success in examinations that have such important consequences. Students sometimes seek copies of the examinations in advance, and they seek to violate the restrictions of the test administration by accessing information during the testing. Students have
colluded with each other and even with teachers to gain advantage in taking the examinations, and they have employed new communications technologies to share information about examinations. Driven by the growing importance of high stakes tests, parents have aided their children to gain what some identify as an unfair advantage by securing documentation from medical professionals to support requests for more favorable testing conditions, such as the suspension of time limits (Lang et al., 2005). Because parents with greater means are more able to pursue such options, these practices are seen as further disadvantaging already economically disadvantaged students.

For teachers the effects of high stakes testing policies may also have effects beyond those anticipated by proponents who view the tests as mechanisms to motivate teachers to redouble their efforts to promote student achievement. Such effects include the additional stress that might be prompted by the high stakes testing initiatives and the associated increased likelihood of teacher burnout (Barksdale-Ladd & Thomas, 2000; Nichols & Berliner, 2007). Opponents of high stakes testing have also noted that such policies may deter some from entering teaching and cause those currently teaching to leave (Goodnough, 2001).

Like students, teachers also may engage in efforts to cheat in order to have their students succeed on high stakes tests (Jacob & Levitt, 2003). Teachers and school administrators have crossed the line between preparing students for examinations and actually providing them with direct information about the content of the examinations. Teachers and school administrators have also been found aiding students during the actual administration of examinations. Decisions about which students take high stakes tests have also been identified as a method of cheating when educators systematically exclude students they believe will have lower test scores and so prevent lower scores from entering the tallies for their classes, schools, and districts (Amrein & Berliner, 2002a).

High stakes testing is also thought to have effects on schools and school districts more generally. Proponents argue that schools and school districts will concentrate efforts on instructional activities designed to maximize student performance on the tests, and so marshall resources to enhance student achievement. The emphasis in such claims is on the positive contributions to achievement as measured by the tests. Opponents of high stakes testing see a similar focusing of effort, but they tend to emphasize the kinds of activities that schools and school districts are abandoning as they concentrate effort to maximize test results. Such opponents point to the narrowing of the school curriculum as subjects not covered by high stakes tests receive less attention and fewer resources and the freezing of the school program in an industrial age model increasingly inappropriate for the information age (Marshak, 2004). Critics point to the reduction in instructional time for subjects such as art and music or to the entire elimination of nonacademic activities such as recess (Goertz & Duffy, 2003). These effects are not viewed as falling evenly on all types of schools and school districts. Rather, schools and districts that have higher proportions of disadvantaged students are viewed as having a greater challenge in bringing student achievement to acceptable levels, and so they are viewed as having to do more to reconfigure their operations to devote greater resources to responding to the testing program and correspondingly fewer resources for activities that are less directly related to maximizing student test scores (McNeil, 2000). Schools and districts serving more advantaged students whose achievement is more likely to meet standards on high stakes tests are seen as having to do much less to reconfigure their operations.

The imposition of high stakes testing programs by the governments of developed nations, from the United States where recent legislation has mandated annual testing of all students, to China and Japan where national tests are routinely used to determine if and where students will go on to higher education (Romanowski, 2006; Saito, 2006), to Russia where a high stakes test now determines who receives financial support for higher education, has an effect on the very governments that have promulgated the policies (Avanesov, 2006). By having governments sponsor and in some cases implement high stakes testing programs, the relationship between governments and citizens is transformed. Government run high stakes testing programs are placing the governments of modern nation states in far more intrusive roles in the lives of citizens, determining the mechanisms by which individual worth and opportunities for advancement will be decided. Coupled with the high stakes, that is, highly meaningful consequences, the deep involvement of governments in standardized programs to assess individuals, has the potential to arm governments with extraordinary power over their citizens.

As accountability and testing programs are extended both earlier (i.e., preschool) and later (i.e., postsecondary) in the careers of students and as efforts continue to make such testing programs universal with fewer exceptions for special classes of individuals such as second language learners or those with special educational needs (Hansen, 1994), the potential for the exercise of governmental power becomes more extensive (Bourdieu, 1991; Shohmany, 2001; Tollefson, 1995). As efforts to link information on individual citizens across programs and sectors increase, the comprehensiveness of information on individuals and their performance in the hands of governmental entities grows (Braman, 2006; Broadfoot, 1996). This runs counter to the expansion of individual rights and freedoms that have characterized the modern state and carries the potential for the exercise of even more extraordinary governmental powers, powers that can be magnified incalculably by developments in human engineering that are gaining momentum as the result of rapid developments in the biological sciences. This prospect has gone largely, but not totally, unrecognized and unremarked upon by both proponents and opponents of high stakes testing.

Teaching to the Test

The prospect of teachers changing their instructional routines to teach directly to the material covered on high stakes standardized tests is highlighted by both advocates of high stakes testing programs and opponents of such programs. Disputes between advocates and opponents on the matter of teaching to the test are thus less about the facts of teacher behavior and more about the context in which such facts should be interpreted.

Advocates view teaching to the test as an improvement over prior practices that they believe have diffused the efforts of teachers and students from the central and most important parts of the curriculum. From this perspective, teaching directly to the test involves an important corrective action. Teachers who modify their instruction to cover the content anticipated on the standardized tests and prepare students for both the content of the tests and the process of standardized testing are viewed as evidence of the type of improvement that high stakes testing is designed to promote. Teachers who promote the level of student performance determined by test developers at the direction of educational managers and policy makers are viewed as upholding standards that may have been missing prior to the implementation of the high stakes testing program. For proponents of high stakes standardized testing policies, teaching to the test is not an incidental by-product of the reform; rather it is a central and essential component of the logical model upon which the reform is supposed to operate (Bushweller, 1997). Perhaps for this reason, charges that high stakes testing promotes teaching to the test have little influence on those who have advocated high stakes testing.

The critics of the spread of high stakes testing programs often begin with the observation that such programs encourage teaching to the test as the basis for a host of related objections. The criticisms only begin with the contents of the tests themselves which are viewed as overly narrow in relation to the entire range of learning that might be expected of students and their teachers. The standardized tests that form the backbone of high stakes testing policies are typically portrayed by opponents as offering only a limited target for the efforts of teachers and students, but a target which attracts an inappropriate level of attention, not based on the value of the knowledge they require, but based on the consequences of failing to achieve mastery (Marshak, 2004). For example, critics ask, if the tests focus on reading and math, and in some cases sciences and social sciences, what will become of the arts, of music and the areas of the curriculum not deemed worthy of testing?

If the content of the tests is the beginning for criticisms about teaching to the test, it is certainly not the end. The opponents of high stakes testing often object to the very format of the standardized tests that are available for use in high stakes programs. The paper and pencil exams with typically limited responses are viewed as offering an overly constrained vision of the nature of knowledge in a world where creativity and innovation are seen as increasingly important. The concerns over the lack of student creativity and original thinking long raised in Asian countries with strong high stakes testing environments have been more recently cited as negative consequences for students in western nations where high stakes testing programs are being expanded to include a greater proportion of the student population. The critics argue that the fact-based conceptions of areas of the curriculum represented in the standardized formats of the tests carry negative consequences for teaching which, in turn, have negative consequences for what they view as more genuine student learning, even while these same students may be achieving higher scores on the exams (Kim, 2005). These and other negative effects are argued to fall more heavily on disadvantaged student populations where schools and teachers must undertake more dramatic changes to prepare students to pass the tests (McNeil, 2000).

Other elements of the critique of the tendency of teachers to teach to the test in response to high stakes testing programs include the charge that such testing involves only a limited sample of the performance of students and as such fails to provide a faithful representation of their capabilities. Such criticisms are often coupled with a recommendation for alternative strategies of assessing student accomplishments such as robust portfolios of student work (Heubert & Hauser, 1999; Hill, 2004). These portfolios are viewed as more valid indicators of student achievement, and the production of such portfolios by students is thought to evoke a broader repertoire of more diverse and creative teaching behaviors.

Finally, those who have criticized high stakes testing programs because of role they play in encouraging teaching to the test argue that such programs so constrict and direct the behavior of teachers as to render them less professional, that is, less comfortable making important instructional decisions based upon the immediate learning needs of the students in their classes (Runte, 1998). Such overly prescribed teaching roles are seen as being less attractive to highly qualified individuals whose failure to enter teaching diminishes the quality of the teaching force and the overall strength of the educational system.

Biographical Note

Gary Natriello is the Ruth L. Gottesman Professor of Educational Research and Professor of Sociology and Education in the Department of Human Development at Teachers College, Columbia University. He also serves as the Director of the Gottesman Libraries and Executive Editor of the *Teachers College Record*. Professor Natriello holds an A.B. in English Language and Literature from Princeton University, an A.M. in sociology and a Ph.D. in sociology of education from Stanford University. He teaches courses for graduate students in educational policy, educational research methods, the sociology of education, and online learning environments. Professor Natriello's research, interests include the social organization of schooling and learning environments, the social aspects of evaluation processes, and the education of at-risk youth.

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VALUE-ADDED MODELS OF TEACHER EFFECTS

Pamela F. Tobe

Importance of Teacher Effectiveness

The ability of teachers to raise student academic achievement varies but the reasons are not always clear. Differences among teachers account for an important portion of the achievement differences among students. Teacher effects exist, they are measurable and significant, and they have a cumulative impact on student performance. The differences between teachers can be quantified as "teacher effects" using value-added models. Value-added models attempt to measure how much value a teacher, or school, has added to a student's learning. The models provide a statistical estimate of teacher or school effectiveness by decomposing the variance in student test scores into portions that are explained by students and portions that are assumed to be related to the current teacher and school.

Teacher effects are based on test scores. They are the variance that remains unexplained after a number of sources of variability over which a teacher and school have no control have been taken into account (ex. student characteristics and background). These variations in student achievement gains (residuals) are interpreted to be a measure of teacher effectiveness. Differences between teachers are the variation in adjusted student achievement gains between classrooms.

Over 70 years of research into teacher effectiveness utilizes student learning outcomes as the significant indicator of effectiveness (Campbell, Kyriakides, Muijs, & Robinson, 2003). Much of this research on teacher effectiveness is directed at improving the preparation of teachers and their development for the purpose of improving student learning. Public policy has increasingly focused on the skill and knowledge development of teachers in order to promote a higher level of student achievement. The logic is that if teacher quality improves through certification standards and professional development, student achievement will follow. The conundrum is that teacher qualifications are not the same as teacher quality. To illustrate, recent studies have not found that California or Texas State Certifications or the national teaching certifications (NBPTS) are producing increased teacher effectiveness (Alexander & Fuller, 2005; Goldhaber & Anthony, 2007; Gordon, Kane, & Staiger, 2006; Hanushek, 2005; Sanders, 2000).

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching*, 1113–1134. © Springer Science+Business Media LLC 2009 There is a discrepancy between what is defined to be a "highly qualified teacher" and a teacher who improves student achievement. We can define an effective teacher as one who is able to improve students' test performance but ascertaining what an effective teacher does is much more difficult. Some aspects of learning are easier to measure than others, but the degree of measurability and the degree of importance are in no way related.

There is a problem of tautology that should be addressed, that is a proposition or statement that, in itself, is logically true. When an effective teacher is defined as one who raises test scores and the measurement of teacher effectiveness is how much a teacher raises test scores this is a tautological. The logic is circular and self evident. If "differential teacher effectiveness is a strong determinant in student learning" (Darling-Hammond, 2000), then they should be two separate variables (teacher effectiveness and student learning). If, however, differences in student learning determine teacher effectiveness the causal interpretation is circular and faulty.

Value-added models, using longitudinal data on students, are purported to separate teacher effects from student effects (McCaffrey et al., 2004). Issues of tautology can to some extent be resolved by using a value-added definition of teacher effectiveness that can be seen as a separate entity from student achievement. Teacher effectiveness measures, or "teacher effects" from a value-added approach, is the difference between how a student performed (observed) and how the student would have done (a prediction based on prior achievement and student characteristics) with a different (typical, average) teacher. No assumptions can be made as to how that teacher would have done with different students or with students randomly drawn from the population. Sanders (1996) and the Tennessee Value-added Assessment System (TVAAS) group advocate using multiyear and multisubject averages of value-added teacher effects because they show some teachers consistently high or consistently low. Multiyear averages are recommended as they provide a more stable indicator of teacher effects by removing some of the noise and regression to the mean effect. One year of teacher effects tends toward the mean but 3 years of teacher effects tends to produce a more definitive pattern with more teachers rising above or sagging below average performance.

Sanders and Rivers (1996) using data from the Tennessee statewide accountability system, TVAAS, found that top teachers facilitated excellent gains for students of all achievement levels but lower achieving students derived the greatest benefit from increased teacher effectiveness. This conclusion is supported by Babu and Mendro (2003), using Texas data, which looked at the impact of having effective versus ineffective teachers for 3 years in a row. They found an almost 50% greater student passage rate with effective teachers over the ineffective teachers at the end of the 3 years. Tobe (2008) found students at all levels benefited equally from having effective teachers although lower-achieveing students were more adversely affected by ineffective teachers.

Nye, Konstantinopoulos, and Hedges (2004), using the data from the Tennessee class size reduction study, Project STAR (Student–Teacher Achievement Ratio), found that an increase of one standard deviation in teacher effectiveness produced student improvements three times larger than a reduction in class size from 25

students to 15. Further, the lowest quartile of students derived the greatest benefits from increased teacher effectiveness. Linda Darling-Hammond has long contended the importance of teacher quality and asserts that poor students get poor teachers. To address the achievement gap she maintains it is necessary for policy to address the supply of "quality teachers."

Gordon et al. (2006) found that students who were assigned to teachers whose prior effectiveness placed them in the bottom quartile lost 5 percentile points from their baseline per year. However, if they were assigned to a teacher whose prior effectiveness placed them in the top quartile they gained 5 percentile points. The average difference between being assigned a top quartile or a bottom quartile teacher is 10 percentile points. Researchers point out that under these circumstances the national black–white achievement gap of 34 percentile points could be closed in 4 years. This perspective, however, assumes that advantaged groups of students are assigned average teachers.

Teacher effectiveness is now being evaluated on the basis of student learning as measured by performance on standardized tests. Research in statistics, improved computer technology, and the availability of computer programs able to analyze longitudinal data, has made it possible to estimate teacher effects on student achievement through value-added modeling. Longitudinal educational research explores these effects in light of student, teacher and school characteristics and factors.

Role of Value-Added

Teachers vary considerably in the extent to which they promote student learning. One way to estimate how effective a teacher is in enhancing student learning is to predict how their students would have performed otherwise with an average teacher. By controlling for their previous achievement and characteristics, researchers can compare these predictions to actual performance. Teachers, whose students perform better than predicted, given their previous achievement and characteristics, can be considered more effective than teachers whose students achieved lower than predicted scores. This difference between the predicted and actual scores can be considered the teacher value-added or teacher effect.

Value-added is a term that derives from economic production-function literature and refers to the effects of incremental inputs. "Value-added" within the educational context has come to mean the "unique contribution of the school or teacher to students' progress over the course of a year," (McCaffrey, 2004). Value-added models (VAM) use a statistical process which employs longitudinal data from standardized tests to model student progress over time providing a quantitative measure of student learning modeled to take into account student characteristics and prior learning. VAM are intended to allow direct comparison of one teacher with another even though they work with quite different student groups. The end result is a statistical estimate of teacher performance or effectiveness called a teacher effect. This measure describes how well the teacher performed in improving the achievement of the students in his or her class and how this performance compares with that of other teachers in the sample (Doran, 2004). Value-added models are not based on a theory about "what makes a good teacher" and the complexity that connation might require. They do not diminish the need for setting high expectations and common curricular standards for all students. Rather, value-added models are capable of incorporating data from multiple sources including classroom observations, measures of curricular standards, and surveys of teacher attitudes and expectations; these models are based on the assumption or belief that good teachers raise test scores. The essence of a value-added analysis lies in separating into quantifiable components the parts of students' test scores attributable to the teacher as opposed to other factors. The primary benefit of employing a value-added model is that it focuses our attention on "increasing student learning as the primary goal of teaching" (Braun, 2005).

The federal No Child Left Behind Act (NCLB) requires schools and districts to be accountable for their students' academic achievement in order to meet the goals of reading and mathematical proficiency by the year 2014. Federal policies regarding adequate yearly progress (AYP) evaluates schools using a cross-sectional approach to compute for all students, by grade and various subgroups, the proportions meeting fixed standards. Initially only academic status measures were used to assess progress toward meeting the national goals. A problem that results from making judgments based on absolute standards is that progress is not recognized. Currently ten states are piloting longitudinal growth models which allow individual student growth trajectories to factor into accountability calculations to provide an estimate of progress by which schools can be assessed. Growth models can also be conceptualized as value-added models where student achievement is parameterized over time.

The purpose for using teacher value-added models is to provide a fair and defensible indictor of productivity which controls for factors beyond a teacher's control. The public school systems are faced with a need to make fair determinations of school and personnel effectiveness in order to hold all schools and teachers accountable. Fairness requires a level playing field. School or teacher evaluation systems using value-added models are being developed and used in an attempt to provide an objective and quantitative measure of teacher effectiveness.

Current Research

Current research into school and teacher effects began with a well-funded large-scale federal research study headed by James Coleman, published in 1966 as the *Equal-ity of Educational Opportunity Study*). Coleman, using an econometric approach, employed a production–function (input–output) model to prove that the unequal achievement by students from different social origins (black vs white and low vs middle class achievement) was a function of unequal educational opportunity; economically disadvantaged students had low educational achievement as a result of inferior schools, less qualified teachers, and the academic atmosphere they provided (Hurn, 1985). Unexpectedly, Coleman found there was no relationship between measures of school and teacher quality and student mathematics achievement. The study found family and peer influences to be a significant factor in student achievement.

research over the following two decades using production–function models (Alexander & Cook, 1982; Coleman, 1978; Hanushek, 1971, 1996, 1997, 1998; Jencks, 1972; Murnane, 1975;) yielded similar results where family background and not schools or teachers made the difference.

Enormous controversy surrounded the initial publication of the *Coleman Report* but fortunately later researchers, "Mood (1969, 1971) and Mayeske et al. (1969) developed the method" (Pedhazer, 1982 p. 199) of communality analysis that was applied to the data of the Coleman report to show its methodological flaws. Lee and Bryk (1989) summarized three types of methodological flaws in analyzing the report – aggregation bias, misestimated standard errors, and heterogeneity of regression – that led Coleman to the mistaken conclusion that school and teacher effects were insignificant. An example of the aggregation bias in the analysis of the report can be seen where teachers' characteristics were attributed to the average of the school (such as teacher experience, qualifications and verbal ability). This was problematic as there is more variation within a school in teacher effectiveness than there are variations between schools (Scheerens & Bosker, 1996). By aggregating teachers experience and qualifications to school averages all the information about variations within schools is lost.

Murnane (1975) found evidence that schools and teachers matter and that school principals evaluations of teachers were very significantly associated with the performance of students while teacher attributes were not associated. Compatible with this finding, Dworkin (1987), exploring teacher work commitment effects, found significant teacher impact on student performance. Both researchers used student level data with teacher, student, and school links. Summers and Wolfe (1977) concluded that the failure to find potent school effects using input–output models were as a result of the aggregative nature of the data which disguised the true impact of the school. Summers and Wolfe (1977) found schools made a significant difference when they chose to look at the "more appropriate pupil-specific data" rather than the aggregated school or district averages. They used a value-added dependant variable, the change in achievement, measured over a period of 3 years. Despite the significant findings from using a value-added approach with specific student–teacher links researchers continued to use the more readily available, less demanding and convenient aggregated data with production–function models.

In 1989, Bryk and Lee published a seminal study using hierarchical linear modeling to examine secondary school mathematics achievement. This study helped establish the principle Summers and Wolfe (1977) had advocated; using pupil specific data and linking it to the teachers and schools made the difference in investigating school effects. Variables from the literature on effective schools were found to be connected to student mathematics achievement (such as a school's academic emphasis, orderly school climate, fair and effective discipline, and school size). Bryk and Lee were interested in investigating a normative environment that could provide a supportive school life for most students, regardless of their background and ability. Although Bryk and Lee's focus was on differences in effectiveness indicators between public and Catholic schools, the methodology was subsequently extended to using the teacher/classroom as the unit of analysis to differentiate teachers. In 1997, Hanushek examined almost 400 production–function models in ninety publications which investigated student performance and its relation to school resources with teachers being the principal resource. His analysis of studies, which extended over a three decade period (1966–1996), could not find a consistent relationship between student performance and school resources (including the commonly employed measures of teacher education, experience, characteristics and teacher–pupil ratios) after family variables were taken into account. Although Greenwald, Hedges, and Laine (1996) suggest more positive effects for some of the resource characteristics examined, most reviewers of this literature appear to agree that the relation of teacher characteristics and student achievement is difficult to interpret or inconclusive (Nye, Konstantinopoulos, & Hedges, 2004). A review of teacher characteristics and student achievement (Wayne & Youngs, 2003) concludes that evolving methodologies able to include information on more than two points in time on students and which attempt to control for student influences, offer promising methods of isolating teacher effects.

Until the 1990s teacher effects were difficult to measure or even identify, not because they didn't exist, but because the appropriate student level data, statistical tools, methodology and technology required for analysis were not available or were otherwise hard to obtain. During the 1990s, interest in measuring teacher and school effects was renewed with the assistance of computer technology, advances in statistics, yearly standardized testing, and digital record-keeping that made it feasible to analyze longitudinal data of schools with teacher–student links. Goldhaber and Brewer (1997) using a national data set (NELS, 1988) with school–teacher–student links, investigated how schooling resources might influence tenth-grade mathematics test scores. They found that teachers' certifications and math degrees were associated with higher math achievement among tenth grade students. These findings were consistent with Monk (1994) utilizing Texas high school mathematics achievement data. Goldhaber and Brewer's results also indicated that observable school, teacher, and classroom variables account for a relatively small fraction of the variance in student test scores but that unobservable factors associated with these schooling characteristics are important.

In the early 1990s Tennessee was one of the few states with data systems in place that tracked schools and teachers over time and linked them to their students' achievement scores. Sanders and his colleagues from the University of Tennessee studied the Tennessee data (Sanders & Horn, 1998; Sanders & Rivers, 1996; Sanders, Saxton & Horn, 1997; Wright, Horn, & Sanders, 1997) and created the Tennessee Value-added Assessment System (TVAAS). They found that teacher effects were more influential on student achievement than any other schooling factor. The TVAAS system use the gain in student achievement to produce a measure of teacher effectiveness by comparing the actual growth in student learning to the expected growth based on a longitudinal trajectory. The expected growth level is created by starting with the normal amount of academic progress that a typical student is expected to achieve in a given subject and grade, and then using statistical controls to adjust the anticipated progress up or down, based on the previous achievement history of each student. Sanders indicates that using a student's prior achievement on multiple subjects, or growth trajectory, has the advantage of screening out factors affecting student learning over which a teacher has no control.

At the same time that Sanders and colleagues were developing the statistical models for measuring school and teacher effects in Tennessee, Webster and Mendro (1997) were working on developing a value-added assessment system for the Dallas Independent School District, DISD, a large Texas public school district. A unique aspect of the DISD is that Webster et al. worked with their stakeholders (parents, administrators, teachers, community etc.) to develop a list of multiple covariates. These covariates were outcomes that reflected district priorities that needed to be included as fairness variables in their measurement model of school effects. They included typical variables such as demographic information, free and reduced lunch status as a proxy for poverty, attendance, and mobility. Test scores incorporated norm-referenced tests as well as the state criterion-referenced tests. At the school level fairness variables included items such as promotion rates, drop out rates, graduation rates, and attendance rates. With input from the stakeholders, the fairness variables at the student and school levels, were weighted according to district priorities and included in the assessment model. Teacher Effectiveness Indexes were prepared from the School Effectiveness Indexes program. A weakness in the system was that only those teachers who had taught core courses that were tested had an index (Webster, 2005). When they first started in the early 1990s, Webster and Mendro used single-level multiple regression methods, but they later switched to a two stage model using regression and two-level hierarchical analysis. They found that a three level hierarchical analysis was not computable with the size of their data sets although more recent advances in technology and software have now made this methodology accessible.

Sanders and colleagues, using state data, and Webster and Mendro, using district data, all found a wide range of teacher effects on student achievement. These effects were also found to be cumulative over time by Sanders and Rivers (1996) and more recently by Nye et al. (2004), and Gordon et al. (2006). Nye et al. (2004) used the Tennessee project STAR (student-teacher achievement ratio) data that looked at the effects of class size reduction. They found that having a one standard deviation increase in teacher effectiveness produced three times the improvement in achievement over a class size reduction from 25 to 15 students was able to achieve. Similarly, Gordon et al. (2006) found the average student assigned to a teacher who was in the bottom quartile lost, on average, 5 percentile points relative to students with similar baseline scores and demographics. In contrast, the average student assigned to a topquartile teacher gained 5 percentile points relative to students with similar baseline scores and demographics. Therefore, the average difference between being assigned a top-quartile or a bottom-quartile teacher is 10 percentile points. Moving up or down 10 percentile points in 1 year is a massive impact. Gordon et al. note that the blackwhite achievement gap nationally is roughly 34 percentile points. Therefore, if teacher effects are additive and were to accumulate each year, having a top-quartile teacher rather than a bottom-quartile teacher 4 years in a row would be enough to close the black-white test score gap. Investigations into the degree to which a succession of teachers influence student achievement indicate significant cumulative effects (Babu & Mendro, 2003; Gordon et al., 2006; Nye et al., 2004; Sanders and Rivers, 1997). Teacher effects, like compound interest, build on prior learning and contribute to or diminish a student's intellectual capital each year. The data indicates that teachers vary in their effects upon learning and that these variations truly matter.

Although in 1997, Hanushek and colleagues could find no consistent teacher effects, in 2005, Rivkin, Hanushek, and Kane (Rivkin et al., 2005), using a value-added approach with longitudinal panel (student level) data, finally found "substantial teacher effects unrelated to degree, certification and experience." They concluded that teacher qualifications explained little of the true variation in teacher effectiveness. They confirm estimates for the existence of substantial variation in teacher effectiveness is within as opposed to between schools. It would appear that with evolving statistical methodologies that maintain teacher–student links, supported by new software and technology, a different picture is emerging of teacher effects on students.

The findings of the past decade using longitudinal data with student-teacher links appear consistent across studies done with national, state, and district level data sets (national – Goldhaber & Brewer, 1997; Rowan, Correnti, & Miller, 2002; state – Nye et al., 2004; Sanders et al., 1997; district – Gordon et al., 2006; Rivkin et al., 2005; Webster & Mendro, 1997). School and teacher effects have a significant impact on student achievement. Teacher effects have been found to be significant even using different statistical models that support the understanding that teacher effects persist and are cumulative across years. The magnitude of teacher effects found has been dependant upon the statistical model used and the type of achievement test scores employed. Rowan et al. (2002) explored the differential effects of the type of model used to estimate teacher effects and found mathematics tests indicated stronger teacher effects than reading tests. Mathematics is considered to be learned primarily in school, whereas reading has a large home-influenced component.

Most value-added approaches remain highly technical and statistically complex. A RAND report¹ by McCaffrey, Lockwood, Koretz, Louis, and Hamilton (2004) discussed and documented the types of statistical processes that are currently being used to analyze longitudinal assessment data. Each methodology McCaffrey et al. (2004), analyzed was able to establish clear teacher effects. The RAND report identified and clarified the benefits and limitations of each group of models. Although it appears school and teacher effects are measurable it is still unknown as to how accurate value-added models are in estimating teachers' influence over student test scores.

A review of the literature did not find experimental or random assignment research studies that could validate the claim that value-added models could "accurately identify" the most effective teachers. A literature search found studies using different models, with the same dataset, obtaining very similar results when identifying teachers as significantly above or below average. Current research on value-added modeling is growing rapidly but as McCaffrey et al. (2004) indicate, they are still too tentative for making high stakes decisions on teacher effects measurements alone, despite current usage by some institutions. The US Department of Education (November, 2005) offered states the choice of participating in a Growth Model Pilot Program (GMPP) which allows individual student growth trajectories to factor into required educational accountability calculations on a trial basis. Nine states (as of December 2007) have approved growth model proposals: North Carolina, Tennessee, Delaware, Arkansas, Florida, Iowa, Ohio, Alaska and Arizona. Currently Tennessee, Ohio, Colorado and Pennsylvania have incorporated value-added models into their state wide assessment systems. Idaho is conducting pilot studies in a few major

Table 1 Value-added	models indicating tea	cher effects			
References	Modeled for	Type of data	VAM type	Teacher effect on math	Unique model features
Sanders et al. (1997), Sanders and Horn (1998)	TVAAS: First system VAM employed by a state	Tennessee state data base, vertically aligned norm-referenced tests	Cross classified mixed effects multilevel model with student-teacher- school link over multiple vears	Contention that individual teachers are the single largest contextual factor effecting academic growth	Uses blocking, student serves as own control in multisubject longitudi- nal test data, no other covariates considered to be needed
Babu and Mendro (2003), Webster and Mendro (1997)	Dallas ISD: Texas district data base begun in 1994	TAAS vertically aligned criterion-referenced tests	Initial OLS model became a 2 Level HLM used with separate regres- sions for test scores	Math effect sizes of .1 to 2.4 depending upon year and grade, found large longitudinal teacher effects on achievement	Longitudinal model uses demo- graphic covariates for fairness and other covariates developed by a committee
Goldhaber and Brewer (1997)	RAND	NELS data (1988, 1990, 1992)	GLS model	$R^2 = .12$ math effect size of teachers	Grades 8, 10 and 12 mathematics tests with teacher-student links.
Rowan et al. (2002)	National	Prospects national data early 1990s	Tests multiple models to look at differences in teacher effects	Cross-classified HLM model of teacher effects sizes of .7285 accounting for 52-72% of variance in student math growth	Same data used in 4 different VAM types help provide an idea of the impact the choice of model have on analysis
Nye et al. (2004)	Project Star data	Tennessee class size experiment data, verti- cally aligned tests	HLM VAM	Effect size = 1,4 to 3.1 R^2 = .1014 for all students but .1518 for lowest quartile of students	Teacher effects in math almost ^{1/5} a std. dev. larger than for read- ing. Teacher effect was 3 times larger than class size reduction
Rivkin et al. (2005)	Texas public schools	TAAS data, vertically aligned	Covariate regression VAM, uses only 1994–95 TAAS test data	R^2 = .164 math teachers, correlations between teacher effectiveness and student achievement 40% higher for math than reading	Designed to yield a lower bound and found a student reduction in class size of ten was less effec- tive than a 1 std. dev. increase in teacher quality distribution
Gordon et al. (2006)	LA Unified School District	State tests not vertically aligned, percentile ranks used	VAM students test scores have been transformed into NCE (norms)	Teacher certification type did not effect student achievement. First 2 years of teaching predict future teacher effectiveness	Bottom quartile of teachers caused students to lose 5 percentile points, top quartile teachers caused students to gain 5 per- centile points

Table 2 Value-added	l models indicating schoo	ol effects			
References	Modeled for	Type of data	VAM type	Teacher effect on math	Unique model features
Scheerens and Bosker (1997)	International meta-anal- ysis using SIMMS data	Estimated the vari- ance explained by schools and classes	USA: Classroom var. component = 46, school var. compo- nent = 10	Teachers effect sizes of .39–.45 or teachers account for 18–28% of classroom variance and schools accounting for ~9–13.5% of variance	Designed as a school effective- ness study but concluded that teachers accounted for about twice the variance that schools did
Yen, Lall, and Monfils (2007)	Qatar national data analyzed by ETS	Used vertically aligned tests to test school effects in 2007 AERA paper	Tests multiple models: OLS, GLS Logistic and HLM	School effects only tested. Found multilevel models provided more precise & less biased estimates of effects	Used vertically scaled test data to see how alternate regres- sion models (empirical, OLS & Logistic and multilevel), compare and as an indication of whether test results were vertically alianed
Daley (2007)	Los Angeles Unified School District, CA	District data for 2001– 2004, CST tests, no vertical alignment, uses Z-scores	Covariate adjustment regression by year and subject	LA Charter Schools, results not yet published but some information available on their website	Unpublished 2007 AERA paper, pilot program using VAM for charter schools
Doran and Izumi (2004)	REACH, proposal for CA State	California state data	HLM VAM	No real data used, only a proposal to the state	Proposal for use in CA, not a practical application
Hershberg, State website	Pennsylvania state PVAAS adopted 2002	State data using math, reading, writing tests	using SAS, Sanders and colleaguescon- sulting, multilevel cross-classified	Uses standards-based criterion- referenced tests. No outcome data available	Uses four levels of proficiency on which schools are graded
Lasley, Siedentrop, and Yinger (2006)	Ohio Teacher Quality Partnership	Ohio State standards based data	Worked with Sanders to create multilevel VAM	Multiple ongoing studies. Results not yet published. Looking at mixed methods to validate VAM	Using VAM in conjunction with other measures of teacher effectiveness
¹ RAND is a nonprofit ∉	American institution that as	sists policy and decision	making through research	and analysis on critical social and ecc	nomic issues such as education.

school districts on value-added usage and certain large Texas and California school districts have begun to use them in school and teacher bonus systems.

A summary of the key value-added teacher effect studies cited in this chapter can be seen in Table 1: Value-Added Models Indicating Teacher Effects. Table 2: Value-Added Models Indicating School Effects summarizes a number of the research studies on value-added school effects as they relate to models and methods developed for teacher effects research and provides some insight into where VAM are headed.

Student Variables

An essential part of a teacher value-added analysis lies in separating into components the part of students' test scores attributable to the teacher as opposed to other factors. The inclusion of student variables that might impact their achievement gains is important because they are beyond a teacher's control. They constitute fairness variables that help level the playing field so that teachers do not benefit from, nor are they penalized for, their students' background characteristics. The most important control measures are students' prior achievement because they are the greatest predictor of current achievement. A teacher has no control over how much students know when they arrive. Other variables often included are demographic characteristics such as gender, race/ethnicity, socioeconomic status (SES), educational program participation status (special education, gifted and talented, limited English proficiency, bilingual, Title I, at risk and migrant), attendance, student mobility, and promotional status.

Different approaches are taken in value-added models to account for student background variables because in modeling student level data the nonrandom assignment of students to districts, schools and classrooms must be taken into account. Teachers are not randomly allocated to districts, schools and classes. Minority and poor students are more likely to have less qualified and less experienced teachers (Darling-Hammond, 2000; Hill, 2007). This nonrandom assignment of students to teachers introduces systematic errors or potential biases into estimates of teacher effects.

Student-school assignments are a function of systematic differences in housing prices (Kane, Rockoff, & Staiger, 2006) and racial discrimination (Weiher, 1991) which introduce a socioeconomic school level bias into student achievement. "Students from impoverished backgrounds do not gain as much from 1 year to the next as more affluent students, it is problematic whether to attribute that to the independent effect of their backgrounds on achievement or to the quality of their schooling," (Ballou, Sanders, & Wright, 2004, p. 39).

A concern in recent years has been the increasing segregation of schools by patterns of race/ethnicity. Research on the racial/ethnic compositions of schools has consistently indicated that student characteristics can bias estimated teacher effects as a result of the nonrandom assignment of students and teachers to schools (Braun, 2004; Hanushek, 2005; McCaffrey et al., 2004). Including student characteristics to remove systematic bias through statistical controls does not necessarily achieve this goal. Many of the variables included are multicollinear such as ethnicity, poverty and

English proficiency. Further, student demography may interact with teacher demography and may be jointly dependent with teacher experience.

Alternatively, Sanders and colleagues, using the EVAAS model, do not include student characteristics. They developed this model for Tennessee and was previously referred to as TVAAS. They contend that using three prior years' of student test score data on multiple subjects takes into account the differential growth rates among students; they identify their process as blocking student effects. The EVAAS model assumes that adding all the other student information is not necessary and takes away from the effects garnered by teacher–student interaction. EVAAS employs a layered model which does not use student covariates and relies only on the covariance among the residual error terms from scores on multiple subjects across multiple test years to account for nonschooling inputs of individual students. Stakeholders in educational systems find blocking a difficult concept to understand and accept and have tended to object to this methodology while other researchers have strongly disagreed with its premise.

The practical problem of acquiring three or more years of test scores on multiple subjects is that not all students have sufficient prior years of test scores as they move in and out of a state or district. Many students have scores available for some years or subjects and not for others. Further, the higher the mobility of the students the less likely it is that continuous years of testing data will be available. Student mobility has been found to be an important variable in student achievement, but it is a more difficult measure to compute from often incomplete student records. Dworkin and Lorence (2007) indicate that student mobility has potentially negative effects on student learning outcomes, as well as the likelihood of completing their high school education. Rumberger (2003) and Alexander, Entwisle, and Dauber (1996), have examined the interplay between student mobility and academic risk and found "non-promotional mobility" occurring when families changed residences due to employment, housing needs, or financial pressures, led to a cost in achievement. Kerbow (1996), using Chicago data, found that student mobility in the form of school change had a significant impact; Kerbow found that, on average student achievement levels improved considerably once mobile students were excluded from consideration. Rumberger (2003) points out that the incidence of mobility varies by race/ethnicity and family income.

Nonpromotional mobility also occurs as a result of changing schools during the year or between years due to changes in residence or changes in school choice. Further, some of the children who experience non-promotional school changes are changing schools but not necessarily residences, for example in order to avoid peer problems; others are new to the school due to residential changes. An analysis by Dworkin et al. (1998) of the academic performance among students who transitioned from elementary to middle schools suggested that there were losses suffered in promotional school changes, as well as those associated with non-promotional and residential changes. Both types of changes resulted in a drop in test scores.

Rubin, Stuart, and Zanutto (2004), point out that when value-added models rely on multiple school years of test data they are susceptible to unreliability as a consequence of student mobility and the often accompanying missing test data. Those teachers having higher proportions of mobile students with missing test data can be less easily

identified as teaching at levels above or below average. Teachers with less student information available on them tend to the mean.

Retention is another student variable that needs to be considered. The promotional status of students' may also interact with non-promotional changes of schools. High mobility may be a contributor to retention and retention a reason to change schools. Texas has a policy of not socially promoting students who have failed to meet academic standards set for grades 3, 5, and 8. The effects of retention on students have been the source of considerable debate in educational research. Lorence and Dworkin (1999), using Texas state data, looked at the effects of retention on subsequent student achievement over an 8-year period. They found that retaining low performing students in grade three benefited their long term growth. Conversely, Hong and Raudenbush (2006), using a national data set, found kindergarten retention was detrimental to student growth. Including a variable for student promotional status or being overage for the grade have been found to be a relevant variables in previous research.

Teacher Characteristics

Prior research on teacher variables have documented the positive matching that occurs between teachers and students such that higher performing students are matched with more qualified, experienced and effective teachers (Clotfelter, Ladd, & Vigdor, 2006; Hill, 2007). This nonrandom assignment of students to teachers can occur within schools as well as between schools within the district and introduces a potential systemic bias (a positive correlation between achievement and teacher effects).

Teacher Qualifications

Teacher qualifications or credentials are considered presage variables. These are variables used as a proxy for predicting teacher quality and expertise under the assumption that a teacher's degree types and certifications are an index of instructionally relevant knowledge (Rowan et al., 2002). Decades of research into teacher qualification variables have shown they produce little difference in student achievement. Research has not supported the assumption that improving teacher qualifications will increase student achievement (Gordon et al., 2006; Rivkin et al., 2005; Rowan et al., 2002).

In contrast to proxy or presage studies, nearly all voices in the field of mathematics education agree on the importance of teachers' actual mathematical knowledge in producing student achievement gains (Hill, 2007; Hill et al., 2005). Teacher subject matter or content area credentials have been found to be important in teaching high school mathematics (Monk, 1996). More recently, Hill (2007), using a national sample of middle school mathematics teachers, found that minority and poor students were more likely to have teachers with less subject matter preparation and less instructional experience in mathematics. Goldhaber and Anthony (2006) found that the largest differential found between teachers was between those certified and

not certified in mathematics. Research on the relationship between teacher subject matter knowledge and student achievement has tended to use proxies for that knowledge such as degree majors and coursework, with results sometimes being contradictory (Rowan et al., 2002).

Current research using value-added analyses, investigating the impact of teacher qualifications on student achievement, has not found that having a master's degree was better than a bachelor's degree (Rowan et al., 2002). Further, no significant difference was found between teachers certified traditionally as those granted alternative certification (Gordon et al., 2006). In Tennessee, Sanders, Ashton, and Wright (2005) found that teachers certified under the National Board for Professional Teaching Standards (NBPTS), a national level voluntary certification process, provided no significant difference in teacher effectiveness. Goldhaber and Anthony, (2006) using North Carolina state data did not find evidence that the NBPTS certification process itself increases teacher effectiveness although they did find that there was a statistically significant increase in student mathematics growth (p = .01, N = 602,577) with NBPTS certified teachers over being taught by a nonapplicant teacher (.04 effect size). Whether this difference is educationally significant is debatable considering NBPTS certified teachers taught fewer poor and minority students and taught at higher performing schools.

A VAM study in Tennessee (Carter, 2003) using interviews, observations and surveys of 100 top teachers explored their educational philosophies, collegial experiences, course work and professional development experiences to look for commonalities in teachers identified as highly effective. They found little correlation between teacher effectiveness and college courses or their grades on these courses. The exception to this was that a relationship was found between teachers with higher math grade point averages in university/college and higher TVAAS math score gains from their students. They also found that teachers who took more math courses led to greater student math gains (TVAAS). The findings of Hamilton County are similar to those found by Monk (1994), using Texas state data, where increased subject matter preparation of high school mathematics teachers was associated with improved student mathematics performance. Monk also found that undergraduate mathematics education courses contributed more to high school pupil performance gains than undergraduate mathematics courses. Hill (2007) looking at a national sample of middle-school mathematics teachers found more math course work and subject specific certification in mathematics made a significant difference to student gains. Hill, Rowan, and Ball (2005), using multilevel mixed model methodology, found that first and third grade students' mathematics achievement gains were significantly related to teachers' mathematical knowledge in their subject matter as well as their understanding of mathematical pedagogy.

Teacher certification has been found to be a poor predictor of teacher effectiveness in prior studies (Gordon et al., 2006). Based on the performance of roughly 150,000 students in 9,400 classrooms each year from 2000 through 2003, controlling for baseline characteristics of students, Kane and Staiger (2005) using a VAM found no statistically significant difference in achievement for students assigned to certified and uncertified teachers. Perhaps the simple dichotomy of certified/not certified is too rudimentary a measure. Hanushek et al. (2005) concluded that the substantial variations in teacher effectiveness that were found to exist were poorly explained by teacher qualifications and experience.

The issue of how much of a difference schools and teachers can make in student achievement is of great importance. Investigating teacher characteristic variables such as qualifications – i.e., degrees, subject matter and pedagogical knowledge requirements, certifications – are appealing to researchers and policy makers because of their manipulability. If these variables are capable of demonstrating substantive effects on student achievement they offer opportunities to improve the educational system. Unfortunately, qualification variables have not yet yielded substantive results but many researchers have suggested that this is because the analyses need to be more refined. There are good teachers and poor teachers regardless of their certification and degree types, but just what makes one teacher more effective than another appears poorly predicted by teacher qualifications.

Teacher Experience

Teacher experience has consistently been shown to make a significant difference in student achievement (Lorence & Dworkin, 1999; Goldhaber & Brewer, 2000; Gordon et al., 2006), particularly in the first 2–3 years of a teacher's career, but it is a nonlinear function which appears to level off after 3–5 years. This finding is consistent with Darling-Hammond's (2000) contention that poor children and children of color have consistently less effective teachers as they are taught by inexperienced teachers who, having gained experience, leave by their third year for schools with stronger academic reputations. Thus, minority schools with poor populations suffer a continuous influx of inexperienced teachers who leave as soon as they become proficient. Recent research by Hill (2007) using a national data sample continues to indicate that poor children have less qualified and less experienced teachers.

Gordon et al. (2006) point out that the policy of not rewarding the most effective teachers for teaching low-income youth leads to an under representation of effective teachers in poor districts. Similarly, Hanushek (2005) points out that teacher preferences for schools with higher achieving, nonpoor students in addition to higher salaries introduces a positive correlation between teacher quality and family contribution to learning. The employment choices teachers make concerning their preferences for the districts, schools and types of classes they care to teach are yet another aspect in the lack of randomization in the educational system.

Teacher Demographic Characteristics

Research into the nature of student-teacher dynamics and stereotyping of students have concluded that racial, ethnic, and gender dynamics between students and teachers have considerable effects on teacher perceptions of student performance (Dee, 2005; Ferguson, 1998; Steele, 1997). Teacher-student demographic interactions may work through the nuance of teacher expectations of students. Clotfelter (2007) found that when a teacher and a student were of the same race the effects on student achievement were positive. Dee (2005) evaluated whether assignment to a demo-

graphically similar environment influences the teacher's subjective evaluations of student behavior and performance. Dee found that students were likely to be perceived as disruptive by a teacher who does not share their racial/ethnic designation. Similarly, both male and female students were more likely to be seen as disruptive by an opposite sex teacher. Teacher race/ethnicity and gender appears jointly dependant upon experience (Wayne & Youngs, 2003).

Process–Product Approaches

To this point the focus has been on value-added models which can be considered part of the econometric or production–function research. Historically, there have been methodological and theoretical shortcomings in production–function research trying to gauge teacher effects on student achievement (Lorence & Dworkin, 1999). The inability of production–function models, which have focused on teacher characteristics, to assist in the search for what works has led some researchers to try process–product approaches. Process–product approaches look for consistent teaching behaviors (instructional practices) associated with increased student achievement. Process–product literature has generally had a more qualitative orientation toward teacher effectiveness. Research inquiring into what a teacher does in the classroom that might make a difference in student achievement. This approach generally requires direct observations, employs smaller scale nonrandom samples with specific student populations, and as such have had limited generalizability and posed problems of triangulation due to subjectivity, i.e., inter-rater variability.

More recent process-product research by RAND Corporation, with national funding, has tried to overcome the limitations of previous studies by using a value-added approach employing large scale longitudinal data, and multilevel modeling. A large group of RAND researchers, Le et al., 2006, conducted Improving Mathematics and Science Education, an observational study that incorporated surveys and interviews of teachers in three districts with five student cohorts over a period of 3 years. The RAND study looked at the impact of reform oriented instructional practices as opposed to traditional teaching methods on student mathematics achievement and found inconclusive results. Researchers found that reform-oriented practices that "stressed instruction that engages students as active participants in their own learning and emphasizes the development of cognitive skills and processes" did not significantly raise student mathematics achievement although there was a modest weak association. They did not find that teacher experience, professional development, having earned a Master's degree, or teacher confidence were consistently significant in mathematics. The RAND study examined each teacher level variable individually and in combination. Adjusted for student demography, results were inconclusive.

Limitations of Value-Added Teacher Effects

Teacher effects developed from numerous value-added studies have been shown to be significant, substantive and cumulative. However, value-added models have little conclusive evidence as to their accuracy and are only comparable within the group of teachers being studied. They cannot tell us what makes a good teacher. Rather, they provide a statistical estimate of teachers' effects upon student test performance which is a proxy for teacher effectiveness. Value-added models produce scores referred to as "teacher effects" as they cannot provide a causal link.

The issue of the nonrandom assignment of students to teachers and schools was discussed in the section on student variables but is reiterated again. Students are not randomly assigned to classes, and teachers are not randomly allocated to those classes. Braun (2006) discusses the fundamental concern that causal attributions cannot be made from these models; the real contribution of a teacher can only be estimated. In the absence of randomization, alternative explanations cannot be discounted. No statistical model, no matter how sophisticated can fully compensate for the lack of randomness in the data.

Teacher effects are developed from student testing data. The accuracy of available data, and the ability of the tests to discern the quality of student learning, determines the quality of the outcome. Interyear and intergrade differences between tests pose scaling challenges in the models. Many studies use vertically aligned tests while others tests are based upon standardized curriculums which have been normed or scaled in some manner to allow comparison to be made. There are many methodological questions about how and whether student test scores can be feasibly, appropriately, and validly used for assessment.

Missing student data is also problematic when creating value-added models of student achievement. Students do not miss taking tests at random; the more mobile and lower achieving students tend to have missing test data. Missing data is also a concern because the number of students available to each teacher improves the stability of the estimated teacher effects. The more students linked to a teacher, the more reliable the estimate of teacher effects (Ballou, 2005). Those teachers, who have more mobile students, have fewer measurements on which to base their teacher effects.

Regression to the mean effects can also bias teacher effects; that is, teacher effects will tend toward the average with the use of only 2 years of data. Previous research (Aaronson, 2007; Nye et al., 2006) has indicated that teacher effects tend toward the median when fewer than 3 or 4 years of student–teacher data are utilized. Some developers of statistical models contend that the missing data, when using three or 4 years of test data is not problematic (Sanders, 2000). Multiyear averages are recommended as they provide a more stable indicator of teacher effects by removing some of the noise and the regression to the mean effect. One year of teacher effects tends toward the mean but 3 years of teacher effects tends to produce a more definitive pattern with more teachers rising above or sagging below average performance.

There are compelling reasons for monitoring teacher performance through their students' achievement. However, value-added assessments are subject to statistical uncertainty. High stakes decisions should not be made on the basis of a single year of teacher effects without relying on administrative assessments, seriously considering observations from professional assessment systems, and classroom and parental feedback. Teacher effects can be inconsistent across years for the same teacher which is why multiyear estimates are considered essential when they are used to support decision making. Research indicates that of top quartile teachers, 57% remained in

the top the next year; bottom quartile teachers saw 43% remain in the bottom the following year (Aaronson et al., 2007). It is therefore important to recognize the instability of teacher effects across years and changing students. Current research still needs to examine the extent to which statistical estimates that are created from student test performance, and attributed to teachers, are accurate reflections of teacher effectiveness.

Summary

The intent of this chapter has been to examine teacher effectiveness from a valueadded approach. Value-added models employ the results of standardized test scores to create an indicator of student growth and attribute the change in scores to a teacher or school. There are many objections to the use of standardized test scores as an educational outcome measure. Although originally intended for student assessment, standardized test scores are now also heavily used to measure school and program effectiveness, for research purposes, and increasingly for accountability purposes. There are arguments that test scores do not measure educational outcomes in terms of the whole student or the outcomes we care about most, raising healthy productive citizens (Heubert and Hauser, 1999; Kennedy, 1999). It is also argued that tests do not measure the whole set of learning objectives for a particular subject as teachers "teach to the test" (Cizek, 2001; Jacob and Leavitt, 2003; Koretz, 2002). High stakes testing also creates undo stress for students (Schrag, 2000). A common contention is that the time burden of testing takes away from instructional time that could be used more beneficially on the untested portions of the curriculum. Standardized tests do not reflect the outcomes of test related efforts that have nothing to do with student learning. Further, there are undesirable effects on the educational process when tests carry high stakes for students and schools (Amrein & Berliner, 2002; Bauer, 2000). Student performance on high stakes tests can determine grade promotion or retention, eligibility for graduation, access to college preparatory courses, or tracking into classes with lower expectations. For teachers, access to additional resources, professional development, choices over grade and courses taught, and continued employment may be at stake. Providing school administrators bonuses based on testing may lead to gaming of the system whereby the results of interest are improved while others, not less important educationally, may be sidelined.

Using test scores as educational outcome measures, however, are not new. Second century imperial China used standardized tests to restrict civil service applicants. Jesuit schools in Europe during the sixteenth century, British schools in 1944, and New York schools in 1865 all used standardized tests for students (Dworkin, 2007). Standardized tests were in use long before the standards based accountability movement pushed forth its agenda in the publication of *A Nation at Risk* (1983). High stakes and standardized tests no longer function solely to assess student performance and serve as a gatekeeper on ability. Standardized tests now also serve to assess the performance of teachers, administrators, schools and districts. These shifts in assessment have been made possible by advances in data collection methods, statistical tools, research methodologies, and technology.

Data sets which include longitudinal information on students, with student-teacherschool links, have made it possible to explore the impact of teachers on students from new and different perspectives. Differences between individual teachers account for an important portion of the achievement differences among students. It is difficult to point to the reasons for variations between teachers but these variations are important factors in student success and are therefore worth pursuing further.

Research using teacher effects keeps the focus on student learning as the outcome of interest. They can assist by providing a statistical measure of which teacher credentials. instructional practices, or teacher attitudes and behaviors may lead to improved student achievement. Thus far, teacher characteristics and certain instructional practices have not been found useful in predicting which teachers will be effective or capable of raising student test scores. Value-added models are a quantitative tool that can be utilized to support effective teaching by identifying schools and teachers that have the greatest need for additional support and resources, those that might benefit from professional development, who might make a good mentor and who may need mentoring support, and provide an additional element to evaluation. They can be used to test theories about which elements may lead to increased student achievement. They cannot be used for causal attribution nor can they tell us why a teacher may be effective or even identify which strategies or practices a teacher may employ. However, if our goal is for all students to have increased academic achievement and differential teacher effectiveness is a strong determinant in student learning then identifying stronger and weaker teachers is in our best interest. We can use this tool to explore theories and possibilities of what helps make good teachers.

Biographical Note

Pamela F. Tobe is a recent recipient of a doctorate in education and serves as a Research Associate in the Sociology of Education Research Group (SERG), Department of Sociology, and the Institute for Urban Education at the University of Houston. Her research interests include school climate, school and teacher effectiveness, and the use of value-added models to inform school district decision making. She is currently working as a grant and program evaluator in addition to working with urban school districts to assist them in understanding the manner in which teacher work attitudes, curricular practices, and assumptions about students affect student achievement as measured by standardized tests.

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TEACHERS AND TEACHING DURING EDUCATIONAL RESTRUCTURING AND REFORMS

Patrick J.W. McGinty

Introduction

Critical to understanding the work of teachers and the process of teaching during restructuring and reform is an appreciation of the historical, cultural and social, political, and ideological embeddedness of the expectations of teachers in national education policy as well as the "best practices" encouraged by individual reform and restructuring movements and agendas. Common to most discussions of restructuring and reform is the idea that school change – whether restructuring or reform – has seemingly occurred in "waves" as collective reactions to past or present political action or educational agendas and most often, this commonly accepted vision of "waves" of educational change agendas begins in 1983 with the publication of *A Nation At Risk* by the National Commission on Excellence in Education (NCEE, 1983).

Although the story differs slightly depending on the commitments, interests and intentions of the storytellers it remains generally consistent on the essential assumptions that there have been two distinct waves of reform. The "first wave," the outcome of the publication of *A Nation At Risk* sought to focus attention on the factors associated with managing schools and student progress – increasing graduation requirements, mandated curricula, time on task, and tightening administrative control (Cohen, 1989). The "second wave" of reform is often discussed in one of two ways: first, as an outright rejection of the programmatic suggestions contained within *A Nation At Risk*; or alternatively, as a reaction to the limited positive results of the "first wave" of reform. Given the varied origins of the "second wave" of reform, it came to include multiple initiatives and concerns and as a result wasn't a unified educational change initiative. However, despite the diversity of perspective and initial assumptions the commonality across the second wave was a generally accepted common goal – the radical, even systemic transformation of schools.

This aforementioned vision of the contemporary understanding of school reform being rooted in *A Nation At Risk* is far from perfect (Murphy, 1992). In reality, America's public schools have been embattled places of learning for nearly two centuries. However, what this "wave-based" vision of contemporary school reform does

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show is how A Nation At Risk galvanized support for the need to change America's schools across a broad spectrum of social, political, and business leaders throughout our nation. In that very real sense, A Nation At Risk accomplished on two fronts what few calls for educational change had done prior: first, as a federally appointed commission calling for school reform, it created a political agenda as well as vehicle for change; and second, it used international measures for the basis of comparison. As a result, A Nation At Risk painted a highly politicized picture of schools as failing to produce students that were the equals of their international peers. Furthermore, it presented for the American public a highly politicized vision of a dystopian future based on a current ongoing crisis – a crisis that only changing our schools could solve. To that end, the commission was quick to point out that their findings are not about identifiable inequities in public education as experienced by any category or group of students, nor is it really even about learning or teaching, but rather it is about identifiable educational concerns that are linked to America's declining status in the global community (Berliner & Biddle, 1995). As stated, "America's position may once have been reasonably secure with only a few exceptionally well-trained men and women. It is no longer (NCEE, 1983, p. 6)." Defined as failing, our educational system was perceived as risking America's productive economic future.

However, while *A Nation At Risk* may not have been about teaching, by recommending, among other things: (1) additional graduation requirements; (2) the use and development of educational standards; (3) the regular use of standardized achievement tests; (4) the extensive and nearly universal use of grades as indicators of academic achievement; (5) more mandatory homework; (6) longer school days and more school days each year; (7) better classroom management – to improve use of available instructional time; (8) improved organization of the school day – to increase the availability of time for instruction; (9) more rigorous teacher preparation; and (10) the development of career ladder programs (NCEE, 1983, pp. 19–23); the proposals found in *A Nation At Risk* were very much about teaching – the social organization of teachers in America's public schools.

The Policy/Political Context for Teachers' Work – Overlapping and Contradictory Policy Initiatives

While *A Nation At Risk* increased professional and public concern for school reform, what emerged out of the reactions to initial reform attempts were sets of disconnected interests wherein identifiable interest groups can be seen as promoting their own uniquely formulated collection of macro – as well as organizational and micro-level proposals designed to "solve" the educational crisis. One approach that developed was a renewal of interest in the teaching of the basic (traditional core) curriculum to increase student achievement. This "basics" approach also then helped to develop and condition other sets of even more politicized concerns as evidenced by the discussion of "culture wars" in our public schools during the mid-late 1980s and early 1990s (Bennett, 1988; Hirsch, 1987; Ravitch & Thernstrom, 1992; Schlesinger, 1991).

Other reform agendas expanded on different interpretations and foci and in turn coupled those interpretations with various forms of social research. In turn, these emergent agendas – many of which remain a part of our current public interpretation of educational problems and issues – involved: moving public schools into for-profit ventures under private management in order to produce required results (Maranto, 2005); offering families tuition compensation (vouchers) toward an education at a successful private school (Payzant, 2003); offering open enrollment (school choice) within a district so that students desiring particular experiences have the opportunity – space permitting – to have them (Chubb & Moe, 1992; Viteritti, 2005); and the perception of the need to promote school improvement.

Over time policy developments (based on input and suggestions of reasonable or "best" practices from these various reform minded interests) form a layer of meaning and activity that conditions how teachers work. This is particularly significant because each of the associated policy developments creates a set of conditions to which school systems, schools, and teachers must respond, but more importantly because they potentially form layers of contradictory, if not at the very least confusing, requirements that directly impact the work of teachers across the nation.

For example, if we follow only the single thread associated with the "school improvement" emphasis there are four policy developments: the educational package commonly referred to as "America 2000"; the jointly yoked "Goals 2000" and the Improving America's Schools Act of 1994; and the federal Comprehensive School Reform legislation in 1998; each of which offer unique policy developments and a convoluted mix of assumptions, interests, and intentions that impact future activities at state-, district- and school-sites.

The Impact of the National Education Goals and America 2000

The National Education Goals – originally published as the National Goals for Education (US Department of Education, 1990) – are the result of an educational summit meeting involving President Bush and the nation's governors. Six goals emerged out of the summit meeting, but more importantly, as a means to accomplish these goals, there developed an increased interest in (1) measuring and assessing student achievement outcomes; (2) site-based decision making; (3) greater curricular rigor; (4) and increased professional development for teachers that provided "real rewards for success with students, real consequences for failure, and the tools ... to get the job done (US Department of Education, 1991, p. 79)." In fact, the joint statement issued by the President and the state governors immediately reinforced these provisions for "real rewards" and "real consequences" by promoting:

- 1. a system of accountability that focuses on results, rather than on compliance with rules and regulations;
- decentralization of authority and decision-making responsibility to the schoolsite, so that educators are empowered to determine the means for achieving the goals and to be held accountable for accomplishing them;

- 3. a rigorous program of instruction designed to ensure that every child can acquire the knowledge and skills required in an economy in which our citizens must be able to think for a living;
- 4. an education system that develops first-rate teachers and creates a professional environment that provides real rewards for success with students, real consequences for failure, and the tools and flexibility required to get the job done; and
- 5. active, sustained parental and business community involvement. (US Department of Education, 1991, pp. 78–79)

Here, issues of the decentralization of authority, accountability, teacher certification, the involvement of the business community, and the omnipresent issues of promoting "excellence" and rewarding "performance" are touted as the means by which to achieve our nation's educational goals. Accordingly, as policy, they become the rhetorical basis for the practice of teaching and the work of teachers in the future.

A mere 13 months after the official publication of the National Education Goals on April 18, 1991, President Bush unveiled America 2000 – the national educational challenge and strategy to meet the National Education Goals. The challenge is one that is marked by interesting juxtapositions of ideas. Among those juxtapositions: the dominant position of business and business interests in reinventing schools; the valuation of character education; the assumption of a technology rich environment; and the centrality of the National Education Goals. When coupled with the assumptions of the National Education Goals of school choice, decentralization of authority, accountability, "excellence" and the rewarding of "performance" the emergent programming was full of potential conflict and contradiction.

Still, tacitly, if not explicitly, the America 2000 challenge shows the predominance of a human capital and market-driven, economically-oriented mindset. Presumably these models would look remarkably similar to the variations on the theme of corporate restructuring efforts of this same period – the so-called Japanese Model – which among other things offered decentralization of decision making and the development of work teams and collective problem-solving. However, as rhetoric solidified into practice the idea of site-based decision making and the decentralization of authority can be seen as increasingly contradictory and in very much in conflict with the renewed call for accountability and the measurement of "excellence" based on rewards for success and punishments for failure.

Additional policy developments further perpetuated the pursuit of rhetorics, goals, policies and programming seeking "excellence in education." However, America 2000 also commits the nation's leadership to pursuing whole-school/comprehensive change as a means of promoting educational excellence.

The Impact of NASDC and the New American Schools

America 2000 and the New American Schools Challenge highlights the growing tension in US education during the early 1990s. Sam Stringfield, Steven Ross, and Lana Smith (1996) refer to this tension in terms of,

two powerful forces ... driving America's demands for better schools. The first force, more traditionally recurring, is idealistic ... The second force is new and economic. (Stringfield et al., 1996)

Stringfield et al. continue by suggesting that what sets this unparalleled combination of forces apart from previous confluences of conditions is the continuous and sustained call for change (Stringfield et al., 1996, p. 1). Understood in terms of ideological vs. economic interests, it is not surprising that following the introduction of America 2000, US education policy comes to increasingly reflect a set of conflated and contradictory influences in the pursuit of whole school change and expectations of teachers' work and their work environments as, namely: equity and excellence; restructuring and reform; nomothetic and positivistic evaluation measures; and lastly a gradual change or immediate results emphasis regarding the timing and temporality of educational change.

Although problematic on many levels, the New American Schools designs remain an important set of comprehensive school reform models in US Education, and as such they have received a great deal of attention in recent years. While they remain attentive to issues of school improvement, the models are driven by an overriding concern regarding the rationalization of educational endeavors. One of those overriding rationalities is the issue of student performance and on this respect even the NAS models and the positive attention they have received provides little more than mixed messages as there is no clear linkage between implementation and performance outcomes in NAS schools (Berends, Bodilly, & Kirby, 2002). Furthermore, the RAND Corporation analysis of the NASDC programming and the NAS designs show that

Externally developed school change models cannot "break the mold" and still be marketable and implementable in the context of current pervasive forms of district and school organization ... Externally developed school change models must assess and counter systemic issues that constrain future forms of implementation ... The use of typical outcome measures, as promoted by current rhetorics favoring school accountability provide a very limited measure of actual student and school performance during the change process. (Berends et al., 2002, pp. 146–150)

In the end, the NASDC and the NAS designs, although highly regarded and having promised to deliver grand results, actually produced conclusions that had little impact on what was known about the difficulties of whole school change. However, since the NAS models were their linked to the National Education Goals, the continuation of the NAS design models was ensured.

The Impact of Standards-Based Reforms: The Improving America's Schools Act and Goals 2000

In part a reaction to as well as an outcome of the already convoluted set of issues overlapping policies, programs, and emphases "in play" by the end of the 1990s,

standards-based reforms developed as school change efforts that involve aligning student assessments to a set of adopted performance standards and the development of accountability systems which are based at least in part upon the form of assessments being utilized. The National Center for Education Statistics describes four components of standards-based reform efforts: (1) content standards – determinations of what student should know and be able to do; (2) performance standards – determinations of how well students must perform to be considered proficient in a particular subject area; (3) state-wide assessments – measurements of student progress toward attaining the goals defined by the identified content and performance standards; and (4) accountability systems, which are intended to collect the information necessary to hold schools responsible for the performance of students (Thurgood et al., 2003). Accordingly, the issue of standards-based reforms was at the core of both The Goals 2000 Act and the Improving America's Schools Act of 1994.

The Goals 2000 Act, signed into law by President Clinton on March 31, 1994 was the first effort to move the issue of standards-based school reform into public discourse. Goals 2000 reaffirms the linkage between educational reform endeavors and *A Nation at Risk* by referring to *A Nation at Risk* as the spark that ignited our collective interest in improving public education. That interest, Goals 2000 asserts, was furthered and intensified by the America 2000 programming developed by the Bush administration. This expressed linkage between Goals 2000, the National Education Goals, and America 2000 reinforces the significance of norm-referenced measures of student achievement, efficiency in terms of both pace and rapidity of change, and links to economic and business interests, but also introduces a newly recognized public concern regarding the growing achievement gap between categories of US students. This latter concern is an interesting inclusion in that by this time this issue was already very much a significant part of the equity-oriented school change agenda in US public education. These intentions are clearly evident in an early Goals 2000 progress report which states,

Though significant, progress to date [referring to the 10 years since *A Nation at Risk*] is insufficient – student achievement it still too low, the gap between the highest and the lowest achievers is unacceptably large, and the pace of improvement is too slow … Improving the education system for all students, rather than on supporting specific categories of students with identified disadvantages … reflects a commitment to raising academic expectations for all students, rather than maintaining the tyranny of low expectations for some … every American child needs a quality education to realize his or her full potential, to build a foundation for lifelong learning, and to become a responsible citizen and productive employee. America's ability to address its challenges of economic competitiveness, crime, and welfare dependency ultimately depends upon the quality of public education and the knowledge and skills of all its citizens. (US Department of Education, 1995, p. 2)

However, within Goals 2000 two distinct sets of potentially conflicting interests are developing. On the one hand Goals 2000 is about improving the system of educa-

tion by raising expectations for all students as well as seeking some way to lessen existing inequalities or inequities. At the same time, Goals 2000 is also very much about the global marketplace and America's economic position in it. In the end, while Goals 2000 is rhetorically supportive of sweeping changes in the education system, it is also supporting a set of concerns that serve to reify the very tyranny it vilifies.

Similar emphases and language are subsequently proposed, and decentralized standards-linked reforms were further developed in the Improving America's Schools Act of 1994. The rationale for the passage of the Improving America's Schools Act (being a reauthorization and amendment of the Elementary and Secondary Education Act of 1965) included an appeal to the public regarding the need to: reduce the achievement gap; promote the National Education Goals and improve schools; authorize greater flexibility in Title I funding appropriations; and promote the development of educational content standards.

However, the standards-based reform effort simply promotes a new trend in educational reform efforts during this period – as there is a noticeable moving away from interest in promoting educational change through manipulating inputs in favor of promoting change through focusing on educational outcomes. This trend toward the use of standards and accountability in promoting educational change is also recognized in the 1998 Comprehensive School Reform (CSR) legislation. Furthermore, also identifiable in the CSR legislation are many of the programming goals from both America 2000 and the Improving America's Schools Act.

Comprehensive School Reform (CSR) Legislation

Comprehensive school reform is most often defined in terms of promoting whole-school or school wide change. By corollary the CSR demonstration (CSRD) program is commonly expressed in terms of a collective negative reaction to the previous piecemeal reform efforts which didn't work, and thus is encouraging of whole-school or school wide change. For example:

Comprehensive school reform is a type of reform process directed at primary and secondary education that relies on the simultaneous change of all elements of a school's operating environment aligned with a central, guiding vision. This new approach was developed in response to the growing dissatisfaction with the traditional piecemeal reform, which focuses on isolated educational gaps (Keltner, 1998);

The Comprehensive School Reform Demonstration (CSRD) Program was established through Public Law 105–78, the 1998 Department of Education Appropriations Act. CSRD provides financial assistance to underachieving schools implementing comprehensive school-reform programs that are based on reliable research and effective practices. It intends to stimulate reform by incorporating a comprehensive reform design, support within the school, measurable goals for student performance, effective research-based methods and strategies, professional development, external technical support and assistance, parental and community involvement, coordination of resources, and evaluation strategies (Faddis et al., 2000); and lastly,

Comprehensive school reform (CSR) ... accepts the importance of standards and accountability but adds to these strategies ... innovations in curriculum, instruction, school organization, governance, parent interactions, and other core features of practice (Slavin & Madden, 2001).

Some scholars go so far as to refer to the CSRD programming as a third wave of educational reform:

The first wave, which occurred in the 1980s, resulted in increased teacher salaries, core-subject requirements, and an expanded academic calendar. The second wave led to improved teaching conditions, with greater emphasis on professional development and teacher retention. The third wave, involving the Comprehensive School Reform Demonstration (CSRD) program, is directed at the whole educational system, with special focus on schools with large populations of disadvantage students. (Church, 2000)

As conceptualizations of comprehensive school reform, each of these definitions are at least partially correct in that the passage of comprehensive school reform legislation was significant in two ways. First, in practice the CSRD program represented a significant federal interest in promoting significant school reforms. Second, in the theorizing and conceptualization of school change the introduction of "comprehensive school change" blurred the boundary between educational restructuring and the continuing reaction to *A Nation at Risk*. Practically speaking, for the federal government to promote a school change initiative that stimulated reform by incorporating a comprehensive reform design, support within the school, measurable goals for student performance, effective research-based methods and strategies, professional development, external technical support and assistance, parental and community involvement, coordination of resources, and evaluation strategies (Faddis et al., 2000) represented a significant policy change.

Implications of the Overlapping Layers of Federal Education Policy

Over time the issues associated with policies advocating whole-school and comprehensive school reform come to reflect both the interests of the "first wave" reforms and the more systemic and structurally attuned reactions to them. However, as evidenced by the contradictory manifest purposes of many of the policy initiatives of the 1980s and 1990s, education policy increasingly reflected more and more of the contradictions to such a point that the passage of comprehensive school reform legislation highlights a relatively unpunctuated relationship between the concerns of *A Nation At Risk* and the developing federal agenda through the National Education Goals, America 2000, standards-based education and accountability.

Consequently, what emerges is a convoluted overlapping of policy emphases designed to encourage some sense of school improvement, school reform, and/or
school restructuring. Contextualizing school reform and school restructuring in this way provides greater insight into the respective proscribed changes in the work of teachers and the process of teaching over time. However, constructing a history of school change in this way also clearly demarcates the ideological boundaries associated with both school reform and school restructuring. On the one hand the concept and idea of "reform" comes to be closely associated with the bureaucratic management of limited numbers of factors that seeks to produce the expected and necessary outcomes for (and by) students. Alternatively, in advocating a radical transformation of schools, the assumption is that through "restructuring" schools, school districts, and over time even entire state-wide school systems would be able to accommodate new forms of curriculum as well as learner–teacher relationships (Hall & McGinty, 2002).

As something apart from restructuring, "school reform" has been closely associated with top-down mandates, administratively imposed models, and limited forms of change in schools and school systems based on bureaucratic management and oversight and/or the introduction of market forces into public education as a means of promoting positive change. Accordingly, the work of teachers and the act of teaching under school reform has undergone change, but such changes haven't always been consistent. As a result one of the most consistent concerns and issues surrounding school reform is the potential for reform to promote multiple levels of programming and requirements for teachers. While multiple levels of programming and oversight might be perceived as minor inconveniences for classroom teachers they also have the potential to encourage contradictory goals or sets of goals and where they do become stifling for the work of classroom teachers. As some have explained such situations:

Typically each new program or mandate is accompanied by a new central office department to administer and control its operation. Like the political mobilizing for each new policy initiative, the rules, regulations, and monitoring of these departments focus only the selected aspects of school operations that each has been charged to redress ... At the school building level, principals now confront a complex web external control. The number of "downtown bureaucrats" who can block proposed local action has increased dramatically. In some instances, these bureaucrats wield their power in petty or even despotic ways. Even under better, more cooperative circumstances, this structure greatly complicates local action and demands considerable inventiveness to circumvent. It has contributed to a broadly shared sense among school participants that they cannot affect solutions to the fundamental problems which they confront. (Bryk, Sebring, Kerbow, Rollow, & Easton, 1998, p. 11)

At the same time however, research associated with this top-down, managerial, even market-based model of educational practice has also produced results that show how limited reform and change in teacher practice produces results in student achievement. Most recently, the focus of this research has been on student outcomes in light of standards-based education (Baines & Stanley, 2006; Clarke, Stow, Ruebling, & Kayona, 2006), federal education policy and No Child Left Behind (Goldrick-Rab & Mazzeo, 2005), the issue of "direct instruction" as opposed to other pedagog-

ical forms (Adams & Engelmann, 1996), and the relationship between rewards/ incentives such as career ladder or other merit-pay system and the work of teachers (Ebmeier & Hart, 1992).

Whatever the case, a simple observation that cuts across these areas of research, their findings, and problem at hand is this: despite the similar emphases, teaching during school reform is a widely varied experience, generally depending a great deal on the depth and breadth of the desired reforms within the school. Some initiatives will undoubtedly promote greater depth and breadth of change and in so doing encourage more of the type of teaching work associated with school restructuring. Other initiatives will seek a more piecemeal school reform oriented approach. Whatever the case, understood in the social, political, and historical context of overlapping, confused, convoluted, and even contradictory policy influences – the work of teachers potentially becomes the battleground on which the fight for school restructuring and reform is fought.

School Restructuring and Reform and Teachers'/Teaching Work

While historical developments have conditioned the state of our schools and the ways in which we think about them and act toward them, they have also conditioned the manner in which we theorize about them, and the types and forms of changes that are proposed in each successive reform or restructuring agenda. To date, sociologists of education have not been shy about involving themselves in. and bringing their unique perspective to bear on, many of the issues and concerns associated with both the equity and excellence movements. As such sociological analyses have involved the understanding of the organization of schools themselves as well as proposing a systemic or structural view of schools as organizations (Waller, 1932; Bidwell, 1965; Corwin, 1973; Weick, 1976). In doing so, sociologists of education have provided (in some ways) the basis for a radically different kind of educational change movement. This movement, the restructuring movement, seeks the systematic alteration of the ways in which schools are organized, their internal practices and educational processes, and their external linkages and to the community, school district, and state government. Restructuring is distinguishable from educational and educational "reform" - the introduction of limited changes in the organizing of teaching and learning processes – on the basis of scope and scale. Not only is educational restructuring about improved learner outcomes, it also promotes altering the types of teaching and learning interactions that occur within the school, greater family and community involvement in schools, and the creation of school cultures of collective commitment and collaboration (Hall & McGinty, 2002).

Although contemporary restructuring efforts have been characterized as the radical transformation of schools, the underlying emphases seek to qualitatively improve learner outcomes, alter student and teacher activity, facilitate family and community involvement, and create a sense of collective commitment and collaboration. The foundational assumptions associated with restructuring and its advocates is that it,

dramatically alters fundamental assumptions about what schools can do, e.g. expect and facilitate new forms of learning at high levels for all children ... [and] it radically transforms the organization of schools because it recognizes the systematic interconnected nature of its components, i.e. only changing parts creates contradictions, conflict and failure. (Hall & McGinty, 2002, p. 496)

Additionally, according to restructuring advocates, school change must be accomplished across a number of interrelated areas: (1) student-teacher relationships; (2) curricula; (3) teacher activities; (4) the use of school and class time; (5) school governance; (6) the development of a common school culture; and (7) the development of linkages to district and state activities (Hall & McGinty, 2002, pp. 495–496).

Priscilla Wohlstetter and Susan A. Mohrman (1994) expand the descriptiveness of these general categories of change by offering a set of ten "Characteristics of Actively Restructuring Schools," including (1) the perception of involvement in broad set of reform activities; (2) the possession of a clear mission statement that was developed collectively; (3) the creation of multiple teacher organized decision-making teams which involved all teachers; (4) active involvement by community members, and the active response by the school to their concerns; (5) the use of curriculum frameworks to guide reform and instruction; (6) the reorganization of the school's schedule to facilitate planning, decision making, collaboration, and interaction; (7) teacher leadership in areas of curriculum and instruction reorganization; (8) extensive professional development opportunities; (9) the encouragement by district personnel to take risks, and a district staff that offered assistance; and (10) the personalization of staff and faculty interaction (Wohlstetter & Mohrman, 1994, p. 3). The benchmarks developed by Wohlstetter and Mohrman help provide a sense of the interrelationship between teacher activity, school structure, student engagement, and community involvement. At the same time, by highlighting the embeddedness of the work of teachers and the process of teaching in these contexts, the understanding of the debates surrounding the work of teachers takes on even greater significance.

One of the most significant points of debate surrounds the origin of the restructuring movement itself. The logic of contemporary school restructuring first coalesced around the publication of results from "The Study of High Schools" (Sizer, 1984; Powell, Farrar, & Cohen, 1985; Hampel, 1987) where the evidence-driven emphasis was placed on the transformation of schools in the pursuit of greater student learning wherein the work of teachers could be radically transformed as well.

Although restructuring agendas have changed over time the school-level response to such initiatives have typically involved three concerns: site-based management (SBM)/ organizational changes; teacher empowerment/work changes; and pedagogical changes. Valerie E. Lee and Julia Smith (2001) in a related statement, suggest that the restructuring of teachers work tends to occur along three significant axes: the division and sharing of work; teacher empowerment; and changes in the norms and goals of schooling. In essence what Lee and Smith offer is a better framework for understanding the research on the relationship between the school, teacher, and student performance and the myriad number of ways in which this triad has been conceptualized within the school restructuring literature. By no coincidence the most extensive research on this

relationship between school restructuring and student performance and achievement has been the ongoing work of Valerie E. Lee with colleagues Julia Smith and Lee Croninger (Lee & Smith, 1993, 1994, 1995, 2001; Lee, Smith, & Croninger, 1995, 1997).

Valerie E. Lee and Julia Smith (1994) begin by drawing a distinction between bureaucratic schools and what they call communal schools – schools that embody principles of shared work, teacher empowerment, and shared goals and norms. Accordingly, Lee and Smith show that there are a number of communal school practices that are positively correlated with student achievement and engagement. They are:

- 1. students keeping the same homeroom throughout high school;
- 2. emphasis on staff solving school problems;
- 3. parents volunteer in school;
- 4. interdisciplinary teaching teams;
- 5. independent study English/Social Studies and Math/Science;
- 6. Mixed ability grouping;
- 7. Cooperative learning focus;
- 8. Student evaluation of teachers;
- 9. School-within-a-school organization;
- 10. Teacher teams with common planning time; and
- 11. Flexible time for classes (Lee & Smith, 1994, p. 3, 1995, p. 249).

Previous research by Lee and Smith (1993) also shows similar gains for middle-grade students. In addition, within this research framework Lee and Smith there provide research evidence which supports a general trend in the more social equitable distribution of student gains when "communal" or restructuring school practices are involved.

Subsequent research conducted in much the same manner (Lee, Smith, & Croninger, 1995, 1997) identifies the use of restructuring practices with pronounced positive student gains in particular subject areas, in this case math and science. Increasingly, this body of research is typically generalized to suggest that (1) restructuring produces systematic change within schools; (2) that schools which experience such changes in their formal and informal organization develop a school culture and curricular program which better serves the student clientele; and (3) restructuring has the capacity to promote greater student achievement and/or outcomes.

Clearly, at the center of this body of research is an assumption about the work lives of teachers, and the relationship of that work to the organization of the school and the experiences that students have within that school. Lee, Dedrick, and Smith (1991) seemingly dealt with this issue when they found and reported on a positive relationship between teacher satisfaction and the organization of the school. Their findings support the general conclusion that increased communal organization and teacher empowerment tend to increase teacher self-reports of job satisfaction and efficacy.

The research on this matter, it would seem, has come full circle. Lee and Smith (2001) have reviewed at length the research on the work lives of teacher and updated their argument regarding the relationship between school organization, teacher satisfaction, and student outcomes. Their revised conclusions on the matter show the significance of the division and sharing of work, teacher empowerment and site-based decision making, and shared organizational norms and goals. In their discussion Lee and Smith (2001)

also show the contemporary significance of this ongoing research and present updated results which continue to show increased student achievement across curricular subjects based on the degree of collective responsibility for learning within schools.

Teacher Burnout: A Case in Point

While the above research shows the positive linkage between teacher satisfaction and improved student outcomes and school organization, perhaps the best documented issue surrounding teaching during reform and restructuring is that of teacher burnout. A. Gary Dworkin and colleagues, over time, have extensively documented that factors associated with teacher burnout can be found in the structure of the school as well as the structure of the nested and overlapping system of educational policies and practices that creates and reinforces teacher expectations (Dworkin, 1987, 1997, 2001; Dworkin, Saha, & Hill, 2003; Dworkin & Townsend, 1994; LeCompte & Dworkin, 1991; Saha & Dworkin, 2004).

Furthermore, Dworkin and colleagues have also shown that the individual pieces of school reform legislation previously discussed have had differing effects on teacher perceptions and feelings of burnout. Dworkin and Townsend (1994) demonstrated how issues of conflict over control – characteristic of conflicts involved in the implementation of site-based decision making – can lead to higher levels of teacher burnout. Interestingly, the extensive data and reporting by Dworkin and colleagues shows how teacher burnout is not only one of the consequential outcomes from changes in education policy, but also how burnout is heightened where the greatest number contradictory policy emphases are evident.

Based on the analysis of a 1977 prereform/pre-*A Nation At Risk* sample where teacher burnout was highest among those individuals serving in schools in which they believed their principal to be unsupportive or themselves as expendable (Dworkin, 2008). However, reporting on a 1986 *A Nation At Risk* oriented data set, Dworkin (2008) notes the highest levels of teacher burnout among moderately experienced teachers, wherein teachers with 10 years of experience had a burnout rate three times their pre-*A Nation At Risk* cohort. Clearly, *A Nation At Risk* with its legislative mandates had a lasting impact on experienced classroom teachers – undoubtedly those same teachers that in the language used by the National Commission on Excellence in Education had been implied to be inadequate, unprepared and incompetent.

Dworkin's additional analyses include a 1991 data set used to represent a site-based decision making reform cohort, a 2000 data set representing high stakes testing burnout patterns, and a 2002 data set showing the burnout patterns associated with the No Child Left Behind legislation. In the 1991 site-based decision making cohort Dworkin notes higher levels of teacher burnout than the 1977 cohort, but lower than burnout levels for the *A Nation At Risk* cohort with the lowest levels of burnout being among the most experienced teachers. In Dworkin's (2008) analysis this difference is attributed to teachers having experience working amid reform conditions as well as having an increased stake in school administrative processes. However, it should be

noted that framed differently this stands to be consistent with Lee, Dedrick, and Smith's (1991) argument regarding school organization and teacher satisfaction.

The burnout patterns of the 2000 high stakes testing cohort analyzed by Dworkin (2008) was shown to have mirrored the burnout patterns established by the 1986 cohort that was studied in relationship to the reforms associated with *A Nation At Risk*. However, Dworkin (2008) notes one significant difference was discovered, in the 2000 cohort the highest levels of burnout occurred among the most experienced teachers (in the 1986 cohort, this was the group with 20–30 years of experience).

Lastly, Dworkin (2008) reports on two waves (2002 and 2004) of data collected surrounded burnout patterns associated with No Child Left Behind legislation. In his analysis of these data sets, Dworkin (2008) concludes that,

burnout levels for teachers with up to 15 years of experience resemble the pattern first found in the era of the implementation of high-stakes testing (in the 2000 data set) ... However, the implementation of NCLB resulted in a shifting upward of burnout levels for each experience cohort in 2002 and 2004 over the pattern for 2000 ... However, the two NCLB waves differed from the high stakes testing data set of 2000 in one respect. Rather than a spike upward among teachers with 20 to 30 years experience, the [data] portrays a lower pattern of burnout among the most senior teachers. This pattern resembles ... all the other data sets, where the most experienced teachers tend to be the least burned out. (pp. 124)

Clearly, as is evidenced by the burnout data presented by A. Gary Dworkin and colleagues, teacher burnout – a known impediment to lasting school reform and restructuring – is very much associated with organizational pressures as well as legislated and policy mandated changes.

Politics, Ideology, and the Contradictions of Teacher Activities and Teaching Work

Whether it is labeled "school reform," "school restructuring," or even simply "school change" the desired end – however pursued – is really about improving student learning. As a result of these diverse agendas, the classroom teacher pays a unique role central to the goals of school reform and school restructuring. On the one hand teachers are expected to support the intended change(s) practically and pedagogically through the work that they do. However, this assertion masks an underlying hotbed of political, organizational, and ideological issues which often overlook classroom teachers as the people whose work roles and personal lives are most at stake. Assumptions and practices surrounding classroom and school leadership, expectations of teachers (and associated demands for time, money, and other resources), ideological and or pragmatic/practical commitments to specific organizational forms and processes, and a near infinite combination of concerns by parents and other community stake holders about what schools *should* do all come into play (Elmore, Peterson, & McCarthy, 1996; Muncey &

McQuillan, 1996). An additional way to consider the politically and ideologically fragmented demands on teachers is to consider the simple choice of words regarding "student learning." While there is likely universal agreement that the work of teachers is ultimately about helping students learn, we commonly fail to recognize that the system in which they are asked to work is highly political, highly ideological, hotly contentious, and as a result potentially contradictory. In order to counter this lack of appreciation for the embattled nature of the teacher's roles I contend that future considerations of school change reject the socially constructed dichotomous relationships - and socially, politically, and ideologically loaded issues and concerns that are at the root of the debate about the work of teachers - between: reform and restructuring; "achievement" and "outcomes"; and high stakes testing versus authentic instruction, exhibition of mastery, and portfolio assessment. Depending on the how it is measured, there is evidence to suggest that student learning can be increased and the work lives of teachers improved by engaging in limited reforms as well as comprehensive school restructuring. At the same time, there is evidence to suggest that student learning and quality of instruction can be effectively measured using both qualitative and quantitative techniques. As for the question regarding, which emphasis or agenda should be pursued (and under what conditions)? The answer(s) depend on not only the existing research (because as it has been shown there is research to support a great variety of issues and agendas), but rather on the answer to a rather direct question: What is our vision of the relationship between teachers, their work, and their work environment?

Conclusion: Implications for Future Considerations

Admittedly, the responses to the aforementioned questions will vary. However, the real concern isn't that the answers vary, but rather that the responses reflect the jointly held needs and interests of both students and teachers. As such, the essential issue regarding the work of teachers during reform efforts is still how their work translates into student learning (however measured) without negatively impacting the potentially fragile individually negotiated (as well as collectively bargained) relationship between personal interests, work role and organizational demand.

While real lives, real opportunities, and real concerns are in the balance, there are a handful of considerations that the existing research does promote as potentially fruitful avenues for future research. First, based on the evidence regarding teacher burnout patterns it is safe to assert that further research in this area would be beneficial and that future research may want to consider the lasting effects of legislatively derived and/ or implied changes in: (1) the definition the roles of teachers and of teachers as professionals; and (2) school organizational and structural changes on teacher burnout. Another plausible direction for future research includes following up on what seems to be an implicit – yet plausible – argument that where changes are made through mandates such as high-stakes testing, accountability and piecemeal reform agendas teacher burnout patterns are more dramatic as compared to cases where professional autonomy, site-based decision making, and restructuring oriented school change efforts are attempted. Second, greater attention on the distal effects of action, policy, and legislation is desperately needed. To suggest that the work of teachers is impacted by federal and state legislation, as well as district and building policies is a foregone conclusion. However, to be able to develop studies that definitively show how policies, legislative enactments, and various forms of human action across space and time has an impact, the strength of that impact, and its conditional or conditioning influence would greatly improve our ability to speak to the work and experiences of teachers and teaching during reform.

Biographical Note

Patrick J.W. McGinty received a Ph.D. in Sociology from the University of Missouri – Columbia in 2005 and is currently Assistant Professor of Sociology at Western Illinois University. His scholarly interests include the social organization of social policy, qualitative and historical methods, the impacts of school reform and organizational change, and the analysis of the effects of social change across time and space. He has previously coauthored work on the social organization of education policy and the significance of mesoanalytic theorizing in sociology. His current writing projects include considerations on the need for a dynamic conceptualization of history in sociological research and the lasting impacts of a Midwestern state-wide school restructuring movement that was initiated in the mid-1980s. His current research is a longitudinal, multilevel analysis of voluntary rural school district consolidation on school practices, work roles, and student outcomes.

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GRADE RETENTION REDUX: A DISSENTING PERSPECTIVE

Jon Lorence

Introduction

A common educational practice with a controversial history is requiring students to repeat a grade. School administrators and teachers often require failing students to repeat the same grade the next school year. Many educators assume that making academically-challenged students retake a grade will enable them to learn the material they initially did not comprehend. Proponents of retention assume that, unless a student has learned the required material, allowing a child who failed a grade to advance to the next grade - the practice of social promotion - will cause the student considerable frustration and eventually will result in further failure. This reasoning also underlies the increasing demand by legislators, public officials, and business executives that students who fail state competency exams should be required to repeat a grade. Indeed, a major reason for greater educational accountability standards now required by state and federal officials is the perception that low-performing students are merely socially promoted from one grade to another without learning the required material. These assumptions underlie President Clinton's (1998) call to end social promotion and the No Child Left Behind Act of 2001 (2002) implemented by the Bush administration which recommended students demonstrate grade level competencies before promotion to the next grade level.

However, the consensus among educational researchers is that forcing low achieving students to repeat a grade is an inappropriate, if not harmful, educational practice. Most college of education professors claim that research overwhelming demonstrates retention in elementary grades is not an effective remediation strategy to enhance student learning outcomes (e.g., Mantzicopoulos & Morrison, 1992; Shepard & Smith, 1990). Jimerson (2004) even argues that grade retention is so detrimental to student academic progress that it is "educational malpractice." The view that making academically-challenged students repeat a grade is harmful to their long-term academic success also pervades publications which address the practical concerns of teachers and educational administrators (e.g., Owings & Kaplan, 2001). Regardless of how poorly students may have performed, critics of retention maintain it is better to place a low-performing pupil in the next grade so that the student can remain with

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L.J. Saha, A.G. Dworkin (eds.), *International Handbook of Research on Teachers and Teaching*, *1153–1175*. © Springer Science+Business Media LLC 2009 classmates and not be viewed as a failure. This perspective assumes retained students suffer such a devastating blow to their self image that they lose interest in their studies and eventually leave school before obtaining a high school degree (Jimerson, Anderson, & Whipple, 2002).

These strong beliefs about the ineffectiveness of grade retention result largely from reviews of research examining the impact of making students repeat a grade. Two seminal meta-analyses are frequently cited as demonstrating that making lowperforming students repeat a grade is an ineffective remediation strategy. The first is by Holmes (1989) who aggregated findings of 63 separate retention studies from 1960 to 1987. Jimerson (2001) later reviewed 22 research articles published largely during the 1990s which addressed the impact of retention on academic performance. Both authors conclude that requiring students to repeat a grade is a futile educational strategy which does not foster student achievement. However, Alexander, Entwisle, and Dauber (2003) questioned the conclusions from both the Holmes and Jimerson meta-analyses. Alexander and his colleagues argued that a large number of the retention studies were flawed, resulting in erroneous interpretations based on "bad science." Whereas Alexander et al. (2003) pointed out general shortcomings of the literature examining the effects of retention. Lorence (2006) systematically examined the individual published studies composing the two major meta-analyses on the retention literature. He concluded that the vast majority of studies cited in Holmes (1989) and Jimerson (2001) did not meet current standards of acceptable research. The present chapter reviews earlier retention studies in addition to more recent findings. Before examining retention research results, it is necessary to list criteria which are useful in evaluating the overall quality of studies on student nonpromotion. These indicators of higher quality research will then be used to evaluate the conclusions reached in the reviewed studies.

Criteria for Quality of Research

Assessing the quality of research findings in the social sciences is extremely difficult because judges often vary on appropriate criteria; disagreements on what constitutes good and poor research are common (Dunkin, 1996). Nonetheless, most researchers would agree that a general set of standards can be followed and that some methodological procedures are more appropriate than others. Five facets of retention research will be examined: (1) the outlet in which the study appears, (2) the nature of the research design, (3) time of group comparisons, (4) the metric of outcome measures, and (5) characteristics of samples. The first criterion is one on which most readers would agree: published papers are usually of higher quality than convention papers, theses, or dissertations which have not been subjected to a review process. Consequently, the current chapter examines only published papers.

The research designs used to assess the effectiveness of grade retention is probably the feature on which judges most often disagree. Although Jackson (1975) recommended randomly assigning low-performing students to retention and promotion groups, practical and ethical issues preclude the implementation of true randomized experimental designs. Parents and teachers may be unwilling to allow random assignment for fear that students would be harmed if retained (or not retained). School policies used to assign students to specific grades and individual teachers also inhibit the implementation of true experimental designs. Consequently, the overwhelming number of retention studies have been based on some form of quasi-experimental "nonequivalent control group design" (Campbell & Stanley, 1966, pp. 47–50). Two general strategies have been used in an attempt to equalize initial differences between retained and promoted students – matching and statistical controls.

During the 1960s and through the 1980s matching was the major procedure used to infer the effectiveness of retention. The mean academic outcomes of promoted students with social and demographic characteristics (e.g., age, sex, race, economic status, etc.) similar to those of retained students were compared with t-tests or one way analysis of variance F tests. Matching eventually fell out of favor because of warnings that conclusions based on matching should be interpreted with great caution. Jackson (1975, p. 619) argued that comparisons between matched retained and nonretained students were likely biased because of the difficulty in identifying those characteristics that initially led to retention. Likewise, Campbell and Stanley (1966, p. 15) and Campbell and Kenny (1999, p. 54) contend that matching offers little help to overcome initial differences between groups. The degree of comparability between matched retained and promoted students is particularly problematic in many early retention studies due to the absence of indicators measuring academic ability prior to retention.

Beginning in the 1980s retention studies based on matching methods began to be superseded by analyses utilizing statistical methods to adjust for potential differences between retainees and nonretainees. Multiple regression procedures and variations such as analysis of covariance were used to statistically control for possible initial differences between students required to repeat a grade and those who were promoted. However, even when baseline differences in academic outcomes were available, many studies cited in meta-analyses of retention failed to statistically adjust for potential differences between retained and promoted students. Although more recent studies employ additional control variables, Alexander et al. (2003, p. 25) point out that it would be impossible to control for all important variables differentiating retained and nonretained students. For example, promoted students may be more mature, have greater familial support, or be less aggressive than retained children. Promoted students will likely obtain higher scores than the retained due to unspecified background characteristics. None of the data sets referenced in the metaanalyses contained an extensive number of variables which might influence student learning outcomes.

A third characteristic of retention studies which may affect findings is the year and grade level used to compare measures of academic achievement. Retention studies are often characterized as using either "same-age" or "same-grade" comparisons. The former term refers to comparing achievement scores between retained and non-retained students when they are of the same age, but in a different grade. To illustrate, students required to repeat the fourth grade would be about the same age as their classmates who were promoted to grade five. A same-age comparison occurs

when the mean achievement scores of the promoted fourth graders (who are now in grade 5) are compared to the test scores of the retained fourth graders at the end of their year of retention. The term "same-year" comparison is sometimes used to indicate achievement differences between retained and promoted students who are of a similar age but in a different grade (Karweit, 1992). Conversely, "same-grade" comparisons usually refer to a contrast made with the achievement scores of retained students in a specific grade and the outcome measure when the promoted students were in the same grade a year earlier. Some researchers use the term "same-grade" comparison to examine differences in the academic performance of nonpromoted students at the end of the retention year with younger classmates who are completing the same grade for the first time, but this kind of comparison is seldom utilized (e.g., Ferguson, 1991; Reynolds, 1992).

The type of comparison used to assess the academic achievement of retained and promoted studies typically yield different findings. Holmes (1989, pp. 21-22) reported that same-age comparisons revealed that retained students evidenced lower scores than their promoted classmates, whereas same-grade comparisons tend to favor nonpromoted students. It is often argued that retained students will obtain high achievement scores at the end of their retention year, compared to the test results of their promoted classmates in the previous year, because the retainees covered the material twice while the nonretainees only had one year of the material (e.g., Alexander et al., 2003, pp. 22-23). Promoted students are therefore at a disadvantage in the same-grade comparison. Alternately, Wilson (1990) maintains that same-age comparisons are biased against retained students because the promoted students have spent an additional academic year being exposed to new material not covered by retained students. Given that each type of comparison (i.e., same-age or same-grade) may bias the findings in favor of promoted or retained students, some scholars have argued that both kinds of comparisons should be presented if feasible. Otherwise, a theoretical justification is needed to choose the appropriate type of contrast. Assuming that the purpose of retention is to enable an academically challenged student the extra time to learn material not comprehended in the first year of the grade, Shepard (2004) believes the same-grade comparison is more appropriate.

The time of comparisons after retention is also important. Some studies evaluate the impact of retention by examining the mean learning outcomes of retained and nonretained students after the year of retention. Such contrasts are more likely to suggest that grade repetition had a positive effect than comparisons of retained and promoted students three or more years after the time of retention.

A fourth characteristic of retention studies to be examined is the measurement scale associated with indicators of academic achievement. Learning outcomes in retention studies are measured with raw scores, normed scores from national tests, scale scores, grade-equivalent scores, and test scores from item response theory models. The substantive implications of using these various measures are often overlooked. Some studies have utilized grade-level or grade-equivalent scores to compare the academic progress of retained and promoted students. However, methodologists have argued that grade-equivalent scores do not adequately measure student learning over time. For example, Coleman and Karweit (1972, pp. 94–95) contend that grade-

equivalent scores do not yield accurate inferences about rates of learning among children at different grade levels. Similarly, Seltzer, Frank, and Bryk (1994) demonstrate that changes in individual achievement scores from the Iowa Test of Basic Skills, based on students in Chicago public schools, were more accurately measured with logit scores derived from a one-parameter item response theory model than from grade-equivalent scores. Assessing the effect of retention using grade-equivalent scores when retained and promoted students were in different grades (the same-age comparison) would likely yield biased findings due to the difference in populations used to calculate grade-equivalent scores.

The characteristics of samples in studies of retention are also problematic. An overwhelming number of the students analyzed are from samples of convenience; few studies are based on any kind of probability sampling design. The interpretability of levels of statistical significance based on nonrandom samples is often ignored. Authors only caution that their findings may pertain only to a specific school district or group of study participants. A final shortcoming is that a majority of retention studies are based on relatively small numbers of retained and promoted students. Often times the sample sizes are so small that there is insufficient power to identify a statistically significant difference even if substantively large differences occur.

Evaluation of Retention Studies

The studies cited in the Holmes (1989) and Jimerson (2001) meta-analyses will be assessed using the aforementioned general criteria of research quality. These two meta-analyses are scrutinized because they are so often cited as demonstrating that making students repeat a grade is ineffective (e.g., Hong & Yu, 2007; Roderick & Nagaoka, 2005; Shepard, 2004; Temple, Reynolds, & Ou, 2004). Whereas most researchers merely repeat the conclusions of Holmes and Jimerson, few scholars have actually examined the individual studies listed cited in the two meta-analyses. A major purpose of the present chapter is to inform readers of the specific shortcomings in much of the retention research.

Holmes Meta-Analysis

The studies cited in the Holmes review of research from the 1960s through the 1980s meet few current standards of acceptable research quality. Of the 63 retention studies Holmes cited, only ten focusing on academic achievement had been subjected to a peer review process. Of these, six studies exhibited inadequate research designs largely because they lacked appropriate controls for differences in initial levels of student ability between retained and promoted students prior to retention in the elementary grades. Only four of the ten published studies attempted to adjust (either through matching or statistical controls) for earlier indicators of student ability prior to retention (Chansky, 1964; Dobbs & Neville, 1967; Niklason, 1984; Peterson, DeGracie, & Ayabe, 1987). But the findings were inconclusive because the extent of initial similarity between promoted and retained students was uncertain in the Dobbs

and Neville (1967) and Niklason (1984) studies. Another major weakness of the studies was the small number of students analyzed. The number of retained students examined ranged from 24 to 106 while the number of students promoted varied from 24 to 104. In only one of the ten published studies Holmes listed was there more than 100 retained or promoted pupils. The average number of retained students in the ten studies was 49 while the mean number of promoted students was 45. If one assumes that two of the studies adequately controlled for initial differences in student ability (Dobbs & Neville, 1967; Niklason, 1984), their conclusions that retention yields negative results is likely attributable to their use of same-age comparisons and reliance on outcome grade-equivalent measures of educational achievement. Both of these factors are likely to yield a negative effect of grade retention on early learning outcomes.

Critics of grade retention often cite the negative mean "effect size" of -0.28 between retained and nonretained students Holmes (1989, p. 27) reports to support the contention that making students repeat a grade in an ineffective practice. However, it is inappropriate to use the term "effect" to denote a causal impact of retention on academic outcomes because of the poor research quality of the many studies Holmes aggregates which do not rule out alternative explanations accounting for the observed lower academic performance of retained students. A more accurate meaning of the term "effect size" is that it only denotes the difference between the means of two groups adjusted by their standard deviations. The choice of studies used to estimate the effect size of retention greatly influences the outcome. For example, Shepard, Smith, and Marion (1996, p. 252) contend that, after repeating the grade, retained students are 0.25 standard deviations behind promoted students if the effect size is computed from the six most tightly controlled studies Holmes cites. However, Lorence (2006) found that, if the five studies in the Holmes meta-analysis which attempt to control for initial differences in academic achievement and economic status are used to estimate the effect size, the standard deviation difference reduces to -0.01. Given the questionable matching process used by Dobbs and Neville (1967), deleting this study raises the effect size to 0.12, suggesting that retention, relative to promotion, may exert a slight positive increase in learning achievement.¹ Even this interpretation is problematic because hardly any of the studies Holmes cites meet current acceptable research practices in the social sciences. Contrary to the many critics of retention who rely upon the Holmes meta-analysis, there is no overwhelming body of "scientific" evidence in the Holmes review which convincingly demonstrates that making students repeat a grade is detrimental to their academic achievement (also see Wilson, 1990).

Jimerson Meta-Analysis

Jimerson (2001) presented an updated overview of 18 refereed papers examining the impact of grade retention on academic performance. Sixteen of the 18 studies concluded that making low performing students repeat a grade had no positive impact on student learning outcomes. However, many of the criticisms made of the Holmes (1989) review also apply to the studies cited in Jimerson. First, the vast majority

of researchers had access to only a small number of elementary school students in a few school districts. The median number of retained students in each of the 18 studies was 42 with a median of 34 students in the control or comparison groups. Given the small number of observations and the lack of power to detect statistically significant findings, partial results from four studies argued that retention was ineffective even if substantial differences favored retained students. For example, a study of Wyoming students (Ferguson, 1991) revealed no statistically significant difference between second grade SRA Achievement scores of 20 promoted kindergartners and 46 of their classmates who were placed into a transition classroom (i.e., retained) before first grade, even though both groups had similar scores on the Gesell Readiness test. However, if one estimates the effect sizes between the two groups from the data Ferguson presents, the mean scores of retained students are 1.17 (language), 0.86 (math), 0.28 (reading), and 0.88 (total score) standard deviation units larger than those of the retained students.² A similar pattern occurs in panel analyses of children who were subjects in the Minnesota Mother-Child Interaction Project (Jimerson, Carlson, Rotert, Egeland, & Sroufe, 1997). Peabody Individual Achievement Test (PIAT) scores among children retained in first (n = 9) or second grade (n = 7)were contrasted to those of a comparable group of academically-challenged children in each of the same grades who were promoted (n = 17 for first graders and n = 11for second graders). Same-grade comparisons were made after the year of retention. Although differences between the two groups did not meet the conventional.05 level of statistical significance, the mean overall PIAT score among the retainees was0.64 standard deviations larger than that of the socially promoted counterparts. Had these findings been obtained from a substantially larger number of students, ceteris paribus, one would have to conclude that retention resulted in at least a positive short term intervention.

Similar to the Holmes (1989) meta-analysis, the most problematic feature of the studies cited in Jimerson's (2001) review is their inability to control for potential differences between retained and promoted students which would influence academic outcomes independent of retention status. Ten of the studies rely exclusively on generating comparable groups of retained and nonretained students through matching, often using a limited number of variables from school records.³ Multiple regression or analysis of covariance procedures are used in four studies (Mantzicopoulos, 1997; McCoy & Reynolds, 1999; Meisels & Liaw, 1993; Reynolds & Bezruczko, 1993). Four studies combine a matching process with statistical adjustments using regression methods (Alexander et al., 2003; Jimerson et al., 1997; McCoy & Reynolds, 1999; Reynolds, 1992). Four of the 18 studies have no baseline measures of the outcome measure at the time of retention (Dennebaum & Kulberg, 1994; Hagborg, Masella, Palladino, & Shepardson, 1991; Johnson, Merrell, & Stover, 1990; Meisels & Liaw, 1993). For example, Meisels and Liaw (1993) use data from the National Longitudinal Survey of 1988 to investigate whether repeating a grade affects student performance when in eighth grade. Although they have social and demographic measures for students, along with the time of retention, indicators of academic performance and behavior prior to grade eight or the time of retention do not exist in the data file. Readers do not know if the observed differences in the eighth grade outcome measures occurred prior to retention, rather than after repeating a grade as the authors claim.

Other studies which conclude that retention is an ineffective educational practice made no effort to control for potentially important variables on which grade repeaters and socially promoted peers significantly differed. In a follow up of Ferguson's (1991) study on the impact of retention on student learning, Ferguson and Mueller-Streib (1996) conclude that the lack of a statistically significant difference in SRA tests scores when students were in fourth grade demonstrates the failure of grade retention, but the authors present no information indicating if the retainees and nonretainees had similar levels of academic ability at the time of retention. Similarly, Phelps, Dowdell, Rizzo, Ehrlich, and Wilczenski (1992) report that California Achievement Test (CAT) math and reading scores of students placed in transitions classes (n = 22) were significantly lower than those of 24 students in a control group at the time of retention. However, the authors made no effort to statistically adjust for the initial differences between the retained and promoted groups. Likewise, Rust and Wallace (1993) found that 60 kindergartners required to repeat a grade were one quarter of a standard deviation lower on a standardized test than their promoted controls, but this initial difference was not adjusted for when examining CAT scores following the retention year.

The lack of comparability between retained and promoted controls is also evident in a study of students in a rural Southern school district. Thirty one children were retained in either kindergarten or first grade while 31 students were promoted (McCombs-Thomas et al., 1992). Retained and nonretained children were matched on race, gender, and grade point average. But the authors admit that the two groups may not have actually had similar academic abilities at the time of retention even if the mean grade point averages did not vary. Retained students were graded only on the material they handed in, but they were held back because they completed considerably less course work than their promoted classmates (McCombs-Thomas et al., 1992). Jimerson's (1999) subsequent analyses of the academic progress of Minnesota youths at the end of eleventh grade also fail to statistically control for initial differences in intelligence and tests of academic ability between retained students and comparison groups of matched low-performing and regular students. Average scores on the Wechsler Preschool and Primary Scales of Intelligence and the Wechsler Intelligence Scale for Children for the retained students were 0.19 and 0.39 standard deviation lower, respectively, than the mean scores of the academically-challenged control group. The degree to which 53 retained kindergartners and 53 matched controls were similar in a study of Marin County California students is also questionable. Mantzicopoulos and Morrison (1992) failed to statistically adjust for an initial difference of 0.20 standard deviations in achievement test scores between the two groups, as well as lower levels of maturity observed among the retained. A follow up study of 25 of the initially retained kindergartners and 15 of the initial control group also did not statistically control for initial levels of ability at the end of the first year of kindergarten (Mantzicopoulos, 1997).

In sum, the adequacy of the research design can be reasonably questioned in 13 of the 16 studies cited by Jimerson (2001) in which the authors conclude that making students repeat a grade is either harmful or ineffective. Findings derived from three

studies are based on a panel study of ~1,200 low income mostly African American children enrolled in government funded Chicago kindergartens in the fall of 1986. The academic performances of these students were followed through the mid 1990s. The research findings of Reynolds (1992) and his colleagues (Reynolds & Bezruczko, 1993; McCoy & Reynolds, 1999) are superior in many ways to other studies cited in Jimerson which argue against grade retention. The Reynolds studies evidence few of the shortcomings observed in the aforementioned articles. The larger numbers of retained and socially promoted Chicago pupils are ample enough to detect statistically significant differences between the two groups than was the case in the prior studies. More important is that, rather than rely on matching procedures, Reynolds relies on multiple regression analyses to statistically control for potential differences between retainees and nonretainees. His data sets also include a more extensive number of explanatory variables, including initial levels of academic performance, which may be related to both retention and later learning outcomes. The first Reynolds (1992) study examined the effect of repeating either first, second, or third grade on gradeequivalent scores from the Iowa Test of Basic Skills (ITBS). Same-age comparisons revealed that, compared to promoted children, retainees obtained significantly lower scores on the reading and mathematics sections of the ITBS three years after the initial retention year, after statistically controlling for sociodemographic variables, parental involvement, school readiness attributes, and baseline indicators of student ability. A similar analysis using logit scores derived from ITBS answers yielded similar negative findings pertaining to the effect of retention (Reynolds & Bezruczko, 1993). Given that same-age comparisons were made in both of the studies, and that grade-equivalent scores were also used as outcome measures in the first study, one could argue that the comparison strategy biases the results against finding a positive effect for retention. However, same-age and same-grade comparisons presented in later analyses of the Chicago pupils, when they were age 14, show that students retained between first and seventh grade obtained significantly lower grade-normed scores on the ITBS (McCoy & Reynolds, 1999).

Only two articles in Jimerson's (2001) meta-analysis conclude that making students repeat a grade improves their academic performance. One study used a matching design to control for potential differences between retained and promoted students. Pierson and Connell (1992) compared the learning outcomes of 74 students retained in grades one through four with 35 students who had been recommended for retention but promoted. Students were matched on grade point average, sex, and grade. The indicator of educational achievement was an aggregate measure based on the average marks in course subjects from grades one through six and the mean reading and mathematics results from standardized national tests. Following retention, the average academic achievement score for the retained children was 0.56 standard deviations higher than that of the socially promoted students and statistically significant. The authors maintain that retention in the early grades may be an effective remediation practice.

The second and more methodologically appropriate study was an analysis of 800 randomly selected first graders from Baltimore public schools (Alexander et al., 1994). The academic performances of these students were measured from the fall of 1982 when they entered first grade through the spring of 1990. Over two hundred students

were retained in first, second, or third grade. Similar to the analyses of Reynolds (1992), Alexander and his colleagues utilized multiple regression procedures to statistically adjust for differences in ability and family background characteristics prior to retention that could influence later educational performance. Both same-age and same-grade comparisons were presented. Reading and mathematics scores of retained children continued to lag behind those of regularly promoted students. However, contrasts between children who repeated a grade and a control group of over 100 low-performing students who were promoted revealed that retained students outperformed the academically-challenged nonretainees. Alexander et al. (1994) concluded that making weak students repeat a grade helped boost their ability to be more successful in later grades. The authors warn, however, that retention is not a panacea because neither the low-performing nonretained or retained students reached the same levels of academic achievement demonstrated by regularly promoted students.

Jimerson (2001) summarizes his literature review by stating that it is consistent with that of Holmes (1989): Jimerson claims that the evidence has converged to demonstrate that retention is an ineffective practice to help students struggling with school. To support this conclusion, Jimerson reports an average weighted effect size of -.31 between retained and promoted students (p. 429). As was the case with the summary effect sizes Holmes calculated, the average difference in outcomes between retained and nonretained students is not defensible because almost none of the studies Jimerson cited adequately controlled for initial differences between the low-performing retained students and those who were promoted. Dunkin (1996, p. 91) would argue that, by ignoring the validity of the conclusions made in the reviewed studies, both Holmes and Jimerson committed the "Nonrecognition of faulty author conclusions" error often made in meta-analyses.

Contrary to Jimerson's (2001) assertion that the negative findings derive from tightly controlled research designs, there are only two sets of studies in the Jimerson review which meet current social science research standards – those of Reynolds and his colleagues (Reynolds, 1992; Reynolds & Bezruczko, 1993; McCoy & Reynolds, 1999) and Alexander et al. (1994). Both the Chicago and Baltimore studies are similar in that they use prospective research designs and track the educational outcomes of urban minority students from first grade to the middle school years. Further, they rely on larger samples of children than available to most retention researchers. More important is that they are able to statistically control for a larger number of factors, unavailable in the other studies, which can affect educational outcomes, particularly indicators of student academic performance prior to retention. In spite of the similarities in research design and analytical methods, the findings from the two studies yield opposing conclusions. Reynolds argues that students should never be retained whereas Alexander and his colleagues contend that retention in some circumstance may help students overcome educational deficiencies.

Additional Retention Studies

Insofar as the conclusions from both the Holmes and Jimerson meta-analyses regarding the impact of grade retention are unwarranted, it is worthwhile to examine other research which has studied the impact of making students repeat a grade on measures of academic achievement. Two studies Jimerson overlooked investigated the impact of placing low-performing kindergartners in a transition class prior to first grade. The first study analyzed Hispanic children in south central California to evaluate the effectiveness of a pre-first grade transition class (Cosden, Zimmer, Reyes, & del Rosario Gutierrez, 1995). The authors initially used a matching technique to control for potential differences between academically struggling kindergartners (n = 36) who were placed in a transition class with those of presumably comparable lowperforming children (n = 36) who were socially promoted to first grade. Although the researchers also applied multiple regression procedures to statistically adjust for between group differences on a limited number of demographic background variables, no indicators of student academic ability at the time of retention at the end of kindergarten were available. Therefore, the paper's conclusion about the ineffectiveness of holding students back a year before first grade is highly suspect. However, a comparable study of New York kindergarten students from suburban schools, using CAT listening and mathematics scores at the end of kindergarten as control variables, also found that the kindergartners assigned to a pre-first grade transition class, as well as children who were later retained in first grade, obtained ITBS reading and mathematics scores similar to nonretained kindergartners when in grades two, four, and five (Southard & May, 1996). The numbers of students in the treatment and control groups were relative small, ranging from 24 to 66.

A series of findings based on analyses of pupils in the US Early Childhood Longitudinal Study Kindergarten Cohort (ECLS-K) indicate that early grade retention does little to improve academic performance when compared to promotion to the next grade. The data base consists of more than 20,000 kindergartners based on a national probability sample representative of schools, teachers, and students. In addition, the authors had access to more than 200 student, teacher, school, and family variables which could be used to statistically control for initial differences between retained and nonretained kindergartners. Another important feature of the data is that measures of academic achievement are based on vertically-scaled Item Response Theory scores, presumably calibrated to enable accurate assessment of change in individual student's learning across different grades. Hong and Raudenbush (2005) first used logistic regression analyses to estimate the propensity for retention. Retained and nonretained kindergartners were then divided into six similar strata. Hierarchical linear modeling procedures were then used to gauge the effectiveness of retention. They found that children who repeated kindergarten did not learn as much as they would have if promoted to the first grade. A companion study which included school assignment and the impact of peers on academic performance also indicated that kindergarten retainees learned significantly less than their promoted counterparts (Hong & Raudenbush, 2006). Hong and Yu (2007) presented subsequent analyses which followed retained kindergartners and first grade repeaters through the end of fifth grade. The nonpromoted kindergartners never caught up to their promoted counterparts. Additional analyses indicated that retained first graders always lagged about one standard deviation behind similar promoted first on reading and math scores through fifth grade.

The methods of Hong and her colleagues are superior to those used in prior research on kindergarten and first grade retention. It should be noted that the researchers calculated only same-age comparisons; no same-grade contrasts were undertaken. Given that academic achievement scores were derived to ensure comparability across grades, same-age comparisons when retained students were one grade behind promoted students may be appropriate. An examination of the mean achievement scores of the retained and nonretained students, however, suggests that children required to repeat kindergarten or first grade obtain levels of learning achievement similar to those of the promoted students when they were in the same grade. A same-grade contrast would imply that retained students did catch up to their promoted counterparts in each of the years after retention. Nonetheless, the Hong studies (Hong & Raudenbush, 2005, 2006; Hong & Yu, 2007) present hypothetical estimates of the academic achievement of the retained children which indicate that they would have learned significantly more if placed into the next grade instead of being held back. Their analyses, which indicate that making children repeat kindergarten or first grade is ineffective, are the most convincing to date.

A recent analysis of 147 rural and outer-ring suburban Minnesota students also concludes that making elementary students repeat a grade is unproductive. Silberglitt, Appleton, Burns, and Jimerson (2006) compared growth rates in reading achievement among retained, matched nonretained children, and regularly promoted students. The authors report that growth rates among the retained students did not significantly differ between the first year in the grade and the repeated year. Further, increases in reading scores were basically the same between the retained and nonretained students. Consequently, Silberglitt et al. presume that repeating a grade had little effect on improving reading achievement. Several features of the study, however, should be noted. Over 40% of the retained subjects are in kindergarten or first grade - grades in which retention seems to have little impact on learning gains. Few retained students were in grades two through five. A problematic feature of the study is that 17 retained students and 19 of the matched promoted students were classified in special education at some time during the observational period, but the authors did not statistically control for differences on this variable between the two groups. One way in which this Minnesota study differs from previous research is that the initial mean reading score of the retained children is almost 0.30 standard deviations higher than that of the matched control group. Although the mean difference was not statistically significant, usually students who repeat a grade have lower levels of academic achievement than those in the nonretained group. While the authors found no statistically significant difference between the growth rates among the retained children in the first year of the grade and the repeated year (which is not unexpected given that 49 students were analyzed), the level of statistical significance between the two slopes almost reached the conventional.05 level (p = .073). Moreover the estimated effect size for retention was 0.39. Caution should be used when generalizing these findings to conclude that all retention is ineffective.

Several other studies have investigated the relationship between retention and postretention learning outcomes. Pomplun (1988) examined the effects of repeating grades one and two (n = 22), grades three and four (n = 15), and grades seven

and eight (n = 10) among students in a semirural Florida school district. A comparable number of borderline and regularly promoted students were matched with the retained students. Students were initially tested on the Comprehensive Tests of Basic Skills in the spring of 1983 and again in the spring of 1984. Retained pupil in the first four grades obtained significantly higher scores in reading, language and mathematics after repeating a grade while the socially promoted borderline students evidenced a decrease in achievement scores. No meaningful differences were observed between the retained and promoted middle school students. Given the small number of subjects and that the academic performances of students were followed for only one year after retention, the findings may be viewed as inconclusive. Still, Pomplun's overall research design is consistent with that used by most educational researchers of the time.

An analysis tracking the academic performance of a cohort of Texas low-performing students from 1994 through 1999 also suggested that making third graders repeat the grade was associated with improved performance on the state's mandatory reading test. Lorence, Dworkin, Toenjes, and Hill (2002) compared the achievement scores of over 700 retained third graders who failed the state TAAS test with those of over 27,000 students who also failed the third grade exam, but were socially promoted to the fourth grade. Same-grade comparisons revealed that, after the year of retention, test scores of retainees caught up with or significantly surpassed those of the socially promoted third graders. ANCOVA statistical adjustments for initial differences in academic performance and socioeconomic background variables revealed that the third grade retainees significantly outperformed the nonretained by 0.30 standard deviation units by seventh grade. Further analyses of this cohort, when students were in their sophomore year of high school, demonstrated that retained third graders continued to evidence higher reading scores than the socially promoted low-performing third graders (Lorence & Dworkin, 2006). The positive effects of grade retention on academic performance were observed among non-Hispanic white, Hispanic, and African American students.

Thus far all of the previously mentioned studies have concentrated on retention decisions made by principals or teachers with the support of the students' parents. Due to new legislative dictates, more school districts now require that students meet a certain level of proficiency before being allowed to progress to the next grade. Few researchers have examined the impact of standards-based retention decisions on student learning achievement. Only two studies have been identified which address this issue. Even though the analyses are based on a similar data set of students in the Chicago Public schools from the mid and late 1990s, the authors reach different conclusions regarding the effectiveness of making students repeat a grade. Using a regression-discontinuity research design which statistically controlled for student prior test performance and social background variables, two economists (Jacob & Lefgren, 2004) stated that third grade retention helped improve both ITBS reading and math scores. Repeating sixth grade, however, was associated with slightly lower academic performance. The authors speculate that the lower mean scores of the sixth grade retainees compared to their promoted classmates is due to the fact that the tests in some grades are more important than others. The effect of retention

is confounded with the impact of high stakes outcomes across different grades. The authors used same-age comparison when the retained and promoted students were in different grades. Sixth grade repeaters were compared with their promoted comparison group when the former were in seventh grade and the latter were in eighth grade. The retained students who took the seventh grade test likely were less motivated to do well because there were no consequences for low performance; students would be placed in eighth grade. The socially promoted sixth graders were more motivated to do well on the eighth-grade test because an unacceptable score would preclude promotion to grade nine.

Whereas findings by the two economists suggested retention has a positive impact on learning outcomes, Roderick and Nagaoka (2005) reported that making students repeat third grade had no effect on reading or math scores; but sixth grade retainees evidenced less academic growth than their promoted counterparts. The divergent findings are puzzling because their analyses are based largely on the same set of Chicago Public School students and a similar regression-discontinuity design which compares students just below and above the same cutoff point required for promotion to the next grade. Seemingly minor differences between the two studies may partially explain the contradictory results. Roderick and Nagaoka included special education students in their analyses while Jacob and Lefgren (2004) excluded children classified in special ed. To control for initial differences between retained and nonretained students, the economists incorporated scores on the initial third grade test in their models. Roderick and Nagaoka, however, used estimated test scores based on growth curve models of previous academic performance as outcomes measures. They argue that this procedure better controls for possible regression effects which low-performing third and sixth graders may have experienced at the time of regression. The Chicago results show the difficulty in trying to make inferences regarding the usefulness of retention.

Discussion

This chapter has attempted to convey to readers a better understanding of the research investigating the impact of grade retention on academic achievement. Few if any of the studies cited in the Holmes (1989) meta-analysis would be accepted for publication today. Several studies Jimerson (2001) mentions are closer to meeting current research standards, but they yield inconsistent findings about the impact of grade retention.⁴ Contrary to the prevailing wisdom among educational researchers, there is no overwhelming body of evidence which conclusively demonstrates that making low-performing students repeat a grade harms their later academic achievement. Although opponents of retention will strongly disagree with this assessment, readers should examine the individual articles Holmes and Jimerson review to reach their own conclusions. An examination of more recent research does not appear to resolve the issue. While a few methodologically acceptable studies demonstrate that grade retention may be ineffective, other studies of comparable rigor suggest that making students repeat a grade may boost academic performance following retention.

Part of the difficulty in summarizing the impact of grade retention on academic achievement is that researchers use different criteria to judge findings. However, it must be pointed out that critics of grade retention often overlook critical shortcomings in an overwhelming number of studies which argue against retention. Instead, the research studies cited by Holmes (1989) and Jimerson (2001) are assumed to be rigorous because of the unsubstantiated claim that many of the reviewed studies used "tight controls" to adjust for preretention differences between promoted and nonpromoted pupils. To illustrate, Holmes (1989, p. 29) as well as Heubert and Hauser (1999, p. 120) maintain that Leinhardt's (1980) study demonstrates the ineffectiveness of grade retention because the mean reading score of 44 kindergartners placed in a first grade transition class was significantly lower after the transition year than the average reading score of 32 low-performing kindergartners promoted to first grade. Overlooked, however, is Leinhardt's discussion (1980, pp. 59-60) which clearly states that retained pupils received 21/2 hours less reading instruction per week than the kindergartners placed in first grade. Compared to the retained students, the socially promoted children received twice the amount of instruction directly related to reading. Retained students were instead taught "learning skills" rather than how to read. In short, the Leinhardt study should be viewed as inconclusive because retained children received much less supplemental reading assistance than the promoted kindergartners.

A comprehensive examination of the grade retention literature reveals a far more exacting standard of what constitutes "acceptable research" is applied to studies which support the practice of grade retention. Research concluding that grade retention is an ineffective remediation practice is not subjected to the higher standards of methodological rigor required of studies which recommend making low-performing pupils repeat a grade. Alexander et al. (2003, pp. 16-20) contend that educational researchers have such strong negative opinions on the subject of grade retention that they are biased against any evidence which contradicts the view that holding students back a year in grade is a bad educational practice. Some support for this view is evident in the kinds of criticisms made against studies which favor retention. For example, Shepard et al. (1996) severely critiqued the Alexander et al. (1994) panel study of Baltimore students by arguing that the reported positive findings for retention were seriously flawed because of the manner in which scores were scaled; special education students were inappropriately included in the analyses; selection effects existed; and regression artifacts resulted in erroneous conclusions.⁵ Similarly, Hauser (2001) and Shepard (2002) were highly critical of the Texas panel study of retained third graders (Lorence et al., 2002) which concluded that grade retention helped improve the academic competencies of low-performing school children. Critics of the Texas study argued that statistical controls for special education students were improper; improvement in test scores resulted from regression effects (i.e., students with extremely low scores always do better the next year), differential attrition of panel members biased results; instructors teach only to the state's accountability test. Later analyses, however, indicate that these criticisms are unwarranted (Lorence & Dworkin, 2006).

Kaestle (1993) argues that educational policies and practices are sometime highly politicized due to the weakness of research findings which prevent scholars from

reaching a consensus. His assessment is particularly relevant to grade retention research. Instead of lambasting studies which disagree with one's position on the issue, or lauding research which support one's view, it seems more worthwhile to develop a set of meaningful criteria on which researchers agree that could then be used to assess the utility of making students repeat a grade. Karweit (1992) submitted such a proposal to address the retention issue over 15 years ago, but her suggestion has been ignored. The following discussion offers recommendations to help improve the interpretability of retention research findings.

A major issue on which educational researchers need to seek consensus is the goal of retention and how success is measured. If the goal of retention is to ensure that students who repeat a grade reach the same level of academic performance observed among never retained students, retention will always be viewed as a failure. All the studies reviewed show that retained children never catch up with regular performing students. However, some studies assume that the goal of retention is to enable lowperforming student the opportunity to learn the material needed to meet the standards necessary for promotion to the next grade level. Other researchers suggest that, following the retention year, retention is a success if retained students catch up with or outperform academically challenged students who were promoted. Even if lowperforming retained students caught up with students in the promoted control group, some researchers concluded that making students repeat a grade was ineffective. Other investigators argue that, rather than looking at the average levels of student achievement, growth rates should be used to assess the effectiveness of retention (e.g., Roderick & Nagaoka, 2005; Silberglitt et al., 2006). Until researchers can agree on the specific goal of retention, there is little hope that scholars will be able to reach a consensus on how to evaluate the effect of making children repeat a grade.

A tendency exists among authors to generalize their findings, based on retention in a specific grade, to the impact of retention in all grades. Few studies have examined the impact of retention across several grades. Although the study of Baltimore students (Alexander et al., 2003) and the Chicago Longitudinal Study (Temple et al., 2004) present separate analyses by some grades, the number of observations in each grade are relatively small. For example, the number of retained students in the Chicago Longitudinal Study range from 66 in second grade to ten in sixth grade. Analyses of third grade and sixth grade Chicago public school students by Jacob and Lefgren (2004), as well as Roderick and Nagaoka (2005), have more adequate numbers of students in each grade to make meaningful inferences. In spite of small samples, a general pattern emerges in which repeating kindergarten or first grade seems less effective than when students are required to repeat later elementary grades (Peterson et al., 1987; Pierson & Connell, 1992). Pomplun (1988) also observed a similar pattern but found that repeating a grade in late middle school or high school was not associated with an increase in learning outcomes. Alexander et al. (2003) speculate that children with the most severe learning deficiencies and behavioral problems are retained in the two earliest grades because their shortcomings are so much more noticeable. Children retained in later grades are assumed to be held back for academic reasons rather than because of immaturity issues. Repeating kindergarten or first grade may yield few positive benefits because they are so far behind their classmates. On the other hand, elementary school students in third grade and above have higher levels of ability therefore retention may enable them to learn material they initially did not comprehend. Research should investigate the academic effects of repeating specific grades instead of generalizing the impact of early grade retention to all grades.

That the effect of repeating a grade varies by grade suggests the importance of knowing the reasons for retention. Few studies, however, are able to identify the specific reasons students were held back a year and why presumably equally low-performing classmates were placed in the next grade. Analyses of children in the Chicago Longitudinal Study (Reynolds, 1992; McCoy & Reynolds, 1999) and the Texas third grade panel (Lorence & Dworkin, 2006) reveal statistically significant predictors (e.g., initial academic achievement, gender, economic status, etc.) of the decision to retain, but the explanatory power of the models are fairly limited. Data from the ECLS-K Cohort were much more detailed, thus enabling Hong and Raudenbush (2005, 2006) to better account for the retention decision.

Knowing why students were required to repeat a year is of great importance in trying to obtain an accurate evaluation of the impact of retention on student academic achievement. Few studies have addressed what economists refer to as the problem of "omitted variables" or endogeneity bias. There may be unmeasured variables which affect both the decision to retain a student and the student's later academic performance. Selecting children with characteristics similar to retained students (i.e., matching) or statistically adjusting for initial differences using traditional regression procedures may result in biased findings. Morgan and Winship (2007) argue that researchers should eschew regression analyses and instead use the "counterfactual" approach to obtain more accurate causal estimates of the impact of programs when only nonexperimental data are available. A detailed discussion of this general approach is beyond the scope of the present chapter; however, some studies have attempted to estimate the impact of retention on academic achievement using the procedures recommended by statisticians and econometricians. Roderick and Nagaoka (2005) utilized instrumental variables (i.e., variables assumed to be related only to the retention decision but not to later test scores) to demonstrate that their initial findings were unbiased. Lorence and Dworkin (2006) applied Heckman's (2005) procedure to statistically adjust for variables influencing the decision to retain students. One first uses a probit model to obtain the probability of being assigned to the retained and nonretained groups. Like the instrumental variables one must identify some meaningful factors which influence retention but not academic performance. This information is then used to obtain the influence of unobserved variables which may bias the impact of being retained on later academic performance. Results from Heckman's method indicated that the impact of grade retention was far more positive among Texas students than evident in the initial effects of retention from regression methods. Hong and her colleagues (Hong & Raudenbush, 2005, 2006; Hong & Yu, 2007) applied Rubin's propensity score method to adjust for initial differences between retained and promoted children. Rubin's method provides the best results if one can be sure that all the important variables used to assign students to retention have been identified. Both the Heckman and Rubin procedures enables estimation of how retained students would have performed if they had been promoted instead of being held back (Morgan & Winship, 2007). Assuming that the assumptions can be reasonably satisfied, results based on these advanced statistical methods will likely yield more accurate assessments of the impact of retention on academic achievement. It is highly likely that these more sophisticated statistical procedures will become mandatory before specialists in the area accept researchers' results.⁶

A crucially important piece of information missing from almost all retention studies is a description of the instructional practices retained and socially promoted students experienced. Karweit (1992) identified several kinds of instruction that retained children faced: The most common was simply receiving the same information given in the previous year. Students are merely recycled through the same grade with no special assistance. Some children are placed in a transition room between kindergarten and first grade where they can receive additional assistance. With the exception of Leinhardt's (1980) study, it is unclear what kinds of instruction children receive in these between-grade classes. Another retention practice mentioned is providing children who repeat a grade with additional assistance and special programs. For example, Peterson et al. (1987) reported that retained elementary school children in Mesa, Arizona did better following the repeated year than their socially promoted counterparts because teachers of the retainees developed individual educational plans to address specific academic shortcomings. Similarly, Jimerson et al. (1997) speculated that retained Minnesota children in elementary grades did somewhat better on math achievement tests than socially promoted controls because the former received additional assistance during the repeated year. After interviewing teachers and school administrators of retained children, Lorence et al. (2002) suggested that the improved academic performance of Texas third graders resulted from the additional assistance and special programs that schools made available to low-performing retained students. Perhaps a major reason for the negative effect of retention on academic performance observed among the low income students in the Chicago Longitudinal Study is because retainees only repeated the grade with no special assistance (Reynolds, Temple, & McCoy, 1997). The specific context of the Chicago school district may also help explain why McCoy and Reynolds (1999, p. 295) are pessimistic that retention when combined with special programs will not improve student academic achievement. Another explanation for the negative impact of retention observed among students attending Chicago public schools is that during the 1980s and through the mid-1990s some observers alleged that the city had one of the worst school systems in the nation (see Hess, 1995; Vander Weele, 1994). Chicago teachers may have had little desire or incentives to help bring low-performing students up to grade level. Detailed observations of a Chicago high-poverty elementary school after the implementation of the city's new educational accountability system in 1996 revealed that teachers devoted less time to children with the lowest scores (Weitz-White & Rosenbaum, 2008). Instead of assisting all low-performing children, those students just below the passing cut-off point received more instruction and resources because such children were viewed as having a greater chance of meeting accountability standards. Retention may be ineffective in a single school district such as Chicago but successful in other educational settings. Regardless of the internal validity of their analyses, investigators should consider those specific facets of the research setting which may preclude the ability to generalize their finding to other school districts.

Thus far this discussion has focused exclusively on student academic performance as measured by achievement tests. Critics of grade retention also argue that making students repeat a grade increases the probability of dropping out of school (e.g., for a review see Jimerson et al., 2002). Space does not permit a detailed discussion of these findings. However, a few impressions of the research on high school dropout behavior are offered. Overall, studies examining the impact of grade retention on dropping out of school are generally of a higher quality than the majority of papers assessing academic learning outcome. Unfortunately, many studies of dropout behavior also suffer from methodological shortcomings such as small numbers of observations. Definitions of high school completion vary considerably. Some studies do not have data indicating if students were actually retained or the grades students were required to repeat. In addition, the majority of dropout studies are based on data collected when students were in high school; few studies have data detailing student academic performance thorough the elementary and middle school grades. Consequently, data are unavailable which would enable researchers to better control for initial differences between retained and nonretained students prior to or at the time of grade retention. In short, the conclusions made about the impact of repeating a grade on dropping out of school are not as definitive as often claimed.

Although critics of grade retention continue to advocate abandoning the practice, the current political climate in the United States will likely reinforce resistance to the practice of social promotion. Students who are failing their courses are unlikely to be socially promoted to the next grade. However, the higher standards for promotion have forced many school districts to begin meeting the challenges of helping academically struggling students, rather than ignore them as was unfortunately the case in the past. The fact that many school districts show considerable variation in their retention practices may provide educational researchers greater opportunities for study. For example, it may become possible in the near future to evaluate the effects of regular retention, retention with assistance, social promotion, and social promotion with assistance or other kinds of remediation strategies. Opportunities may arise which will enable researchers to better investigate the causes of retention, the kinds of educational practices schools implement for retained children, and the effects of these retention practices on students' educational achievement.

Biographical Note

Jon Lorence is Associate Professor of Sociology at the University of Houston and a cofounder of the Sociology of Education Research Group (SERG) at the University of Houston. His interests are the impact of grade retention on educational outcomes, characteristics of effective teachers, educational measurement, and program evaluation. He has recently published in *Educational Research Quarterly, Review of Policy Research* and *The International Education Journal*.

Notes

- 1. The specific studies used to derive the effect sizes are presented in Lorence (2006, p. 748).
- 2. Reynolds (1992, p. 107) considers effect sizes with an absolute value of 0.20 or higher as "meaningful."
- 3. The ten studies using strictly matching procedures are: Dennenbaum and Kulberg (1994); Ferguson (1991); Ferguson and Mueller-Streib (1996); Hagborg et al., (1991); Jimerson (1999); Johnson, Merrell, and Stover (1990); Mantzicopoulos and Morrison (1992); McCombs-Thomas et al. (1992); Phelps et al. (1992); and Pierson and Connell (1992).
- 4. Over half of the retention studies listed by Holmes (1989) and Jimerson (2001) have appeared in only two journals *Journal of School Psychology* and *School Psychology Review*. No empirical study which concludes that making students repeat a grade may be useful has been published in these journals over the last few decades.
- 5. Alexander et al., (2003, pp. 265–279) prepared a lengthy rebuttal to their critics, but this response has been ignored among those who believe grade repetition is an inappropriate remediation strategy.
- 6. Findings based on hierarchical linear models used by Hong & Raudenbush (2005, 2006) also show that school setting can have an important effect on student learning outcomes. Future researchers will likely use HLM statistical procedures to obtain more accurate estimates of how retention affects individual student performance.

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TEACHERS AND TEACHING IN AN ERA OF HEIGHTENED SCHOOL ACCOUNTABILITY: A FORWARD LOOK

Lawrence J. Saha and A. Gary Dworkin

Introduction

It is increasingly recognized across both developed and developing countries that education quality is of concern to more than ministries of education (Ross & Jurgens-Genevois, 2006). Pigozzi (2006), for example, observed that governments, business, and the general public have begun to recognize that differentials in the academic performance of a nation's student body have broad ramifications. With continued globalization, comparative educational attainment is manifested in comparative economic improvement. Further, the increasing use of comparative achievement tests, including the PISA and TIMSS survey projects, permit direct comparisons among the youth of different countries, with the potential that prospective international investors can gauge the relative level of expertise of different national labor forces. Likewise, national examinations permit comparative judgments about the quality of labor forces both between and within countries. These differentials may also serve as prima facie evidence and justification of differential and pejorative treatment of various minorities within a society, as "disparities in educational quality often mirror other inequalities, which many view as directly tied to the fulfillment of human and other rights" (Pigozzi, 2006, p. 41).

The New Educational Accountability

Concerns among myriad stakeholders in every country's education system have resulted in calls for enhanced educational accountability, but the nature of these calls and the underlying assumptions of those voicing concern differ around the world. Diverse reports on educational accountability cite three broad areas of concern. Accountability, especially in developing countries (and to no small degree in some of the most economically developed countries) has emphasized the need for students to take personal responsibility for their own education. Such responsibility is not limited to the completion of homework and improving attendance, but also of developing a sense of ownership of one's education (Anderson, 2004, p. 105; Holloway, 2003).

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Alternatively, school accountability in numerous developing countries has focused on ethical practices by governments, educational officials, and school administrators to ensure that the mandate of UNESCO, that a nation offers "Education for All," is available for their citizens. The focus on ethics is intended to end corrupt practices in the provision of, and practices in education. Some of these practices concern the diversion of national education funds away from the education of students to corrupt officials, the requirement of bribes in order to gain access to public education or to obtain teaching positions, or to the leaking of copies of examination papers to provide some individuals with unfair advantages, and to other practices that diminish opportunities to learn (see Hallak & Poisson, 2002). While the diversions of funds that result in limitations on student access to education occur more often in developing countries, as reported by UNESCO, instances of cheating on standardized tests by school administrators and teachers in order to inflate school passage rates, yet deprive students of true opportunities to learn, are not uncommon in the most developed countries. The artificially elevated test results garner pay raises and rewards to school personnel, but deny students whose tests have been altered the necessary academic enrichment needed to enable them to learn the tested material. The schools thus not only cheat the taxpavers, but deprive the students as well.

Finally, school accountability in developed countries, where the Standards-based Reform Movement (Standards Movement) is pervasive, call for the external evaluation of student learning through the use of standardized tests. The results of the tests are then used to hold schools, school administrators, and teachers responsible for student learning outcomes. In Chap. 32 of this *Handbook*, Dworkin argues that the Standards Movement makes the following assumptions about schools and their personnel: (1) that low student achievement is the result of teacher and school administrator incompetence that can be redressed through the use of draconian policies needed to motivate school employees to do their job and school children to want to learn, and (2) a single indicator, such as a standardized test, is not only the most efficient means by which to measure student learning, it is also the most accurate.

Developed and developing countries have generally agreed that teachers, especially well-trained teachers, are the crucial linchpin between the educational goals of a society and the delivery of education to the country's future labor force. Recently, contrasting the US and the European Union, Hopmann (2007) distinguished between the "strong tradition of testing" that describes the United States and the "strong tradition of standards" that describes the European Union. Under the aegis of the Standards Movement in which high-stakes, standardized tests are the principal measuring instrument, the US has personalized comparative achievement gains so that the failure to raise test scores becomes costly to teachers, campus administrators, and school districts. By contrast, many European countries, as well as countries in other parts of the world, have relied on lower-stakes accountability tests that do not punish school stakeholders for the poorer test results. Instead, governments recognize that a partnership between the state and teachers will be more effective in enhancing student achievement than strategies that blame and punish teachers for student test score results (see The Educational Institute of Scotland, no date). The European model is widely accepted in developing countries, too. Perera (1997) described the Sri Lankan

activity of "changing schools from within," while Ali (1998) called for "mutual accountability" in Pakistani schools, and van Nuland and Khandelwal (2006) noted the significance of considering teachers in South Asia as "professionals." Likewise, the Australian School Accountability and Improvement Framework that was adopted by several states prescribes considerable self-assessment exercises by school personnel, the use of the information found to implement improvements, and the reliance on external professionals to provide collegial assistance (Education Queensland, 2000) and (Victoria, Department of Education and Training, 2006).

Carnoy (1999) has called for changes in US standards-based accountability to the use of rewards rather than punishments as the vehicle that improves student and teacher performances. Darling-Hammond (2000) and O'Day (2007) have made the distinction between "bureaucratic accountability," in which a body of knowledge is agreed upon by a state agency or a legislature and then converted into a standard-ized test, versus "professional accountability," in which the capacity of teachers is enhanced and they are afforded enough autonomy to teach well and broadly. This form of accountability has emerged from the teachers themselves out of pride in craft, rather than fear of sanctions meted out by authorities. However, professional development and autonomy rest upon an assumption often doubted in the US – that teachers are subjects of respect.

Given this growing level of accountability and risk, it is likely that changes are occurring in all facets of teachers' careers, and also the ways that they teach. Starting with recruitment, the attractiveness of the teaching profession will most likely create a selectivity whereby only particular types of individuals, from particular types of backgrounds, will want to become teachers. Second, the education and training of teachers will certainly incorporate an awareness of, and a preparation for the challenges that increasing accountability will bring. The ways that teachers interact with students, the ways that teachers teach in the classroom and the collegial relations between teachers and their supervisors are sure to be affected. Survival, and indeed, getting ahead in this new environment will certainly require the development of confident independence where teachers will trust only themselves, lest they get pulled down by their peers. In addition, they will value less the time they spend with poorly achieving students and will not be unduly worried if this category of student drops out.

The stress of a high-risk accountability environment will also make teachers more vulnerable to burnout. In the new accountability climate, the managerial style of a school principal is less likely to be democratic and more likely to be authoritarian, and we have evidence that this latter type environment is more conducive to burnout (Dworkin, Saha, & Hill, 2003). Overall, therefore, the impact of growing school and teacher accountability is likely to affect all aspects of the teaching profession and teachers' work. In this context, we need a new sociological reexamination of teachers and teaching.

While the Standards Movement was present in some form in many developed societies, its more draconian consequences were either unknown or poorly articulated. In the U.S, accountability did include tightening standards and competency testing of teachers (as described by Dworkin, 1997, and updated in Chap. 32 of this *Handbook*), but the prospect of school closings and the reauthorization of schools as charters had not been a reality.
The Changes in Teacher Roles

The current dichotomy in school and teacher accountability, between bureaucratic and professional development models, would not be so important if the role of teachers were less multifaceted and essential for the learning process. In addition, we know that other aspects of schooling both compliment and support the work of teachers. With the development of sophisticated statistical models that we now have, we can partition the variance in student achievement into the various contributing components. According to Hattie (2003), the order of magnitude of factors accounting for students' achievement is as follows: (1) the students – 50%; (2) teachers – 30%; (3) home – 5–10%; (4) schools (finances, class size, buildings, the principals) – 5–10%; and (5) peer effects – 5–10%. Given the relative importance of teachers in this list, the grounds for the heightened accountability movement for improving student achievement is well placed.

On the other hand, the roles that teachers are expected to perform are not equally related to their contribution to student learning. Nevertheless, they are expected to perform these roles in spite of the fact that accountability policies tend to impact only one or two of them. Valli and Buesce (2007) point out that while teacher roles have been remarkably resistant to change, there are four main areas of the expectations of teachers which have been consistent: instructional, institutional, collaborative, and learning. Nevertheless, because the pressures to raise student achievement, at least in the United States, have focused on teachers, their workload, as a result, has "increased, intensified, and expanded" (p. 520). Furthermore, the various roles that teachers are expected to perform cannot be easily compartmentalized, so that while classroom instruction may appear to be of primary importance in contributing to student achievement, other teacher roles, whether they be administrative, disciplinary or caring cannot be neglected.

As a result of their research Valli and Buesce (2007) found that the impact of various accountability reforms had serious impacts on teacher behaviors, and the ways that teachers performed their roles. First of all, they found an impact on pedagogy, that is, the ways the teachers taught their subjects. In many instances, they found that teachers no longer felt in control of the curriculum that they had to teach. Many felt that their own teaching practices had to follow "someone else's plans," and that the pace was described as "hit-or-miss," or "drive-by" teaching (p. 545). With respect to their relations with students, teachers felt that that they no longer knew the student, but only the data related to the student. In effect, they felt that the emphasis of accountability reforms took attention away from the student and put emphasis on the data of test scores (p. 548). Finally, the pressures from the accountability reforms added to teacher stress. Valli and Beuse found that even principals were affected by the pressures put on teachers. "I can't make it go away" was a comment by one principal (p. 549). The increased stress led to increases in teacher turnover, and implicitly to higher levels of teacher burnout (p. 550). These pressures are exacerbated by findings which suggest that the students themselves hold negative views about traditional teaching practices (Perreault & Isaacson, 1995). Therefore, under these high pressure conditions, one can understand how forms of data manipulation regarding test scores, and also forms of "teaching to the test" can occur.

However, not everyone agrees about the negative changes in teacher behavior attributed to heightened levels of accountability. Greene (2005), for example, argues that the evidence for the negative effects of standardized testing are not supported by all research. He contends that the costs to schools of test administration, and the various forms of test manipulation are greatly exaggerated. Clearly, more research needs to be conducted on these issues. But before that research takes place, there needs to be a rethinking of the issues which deserve be addressed. To facilitate this process, we put forward in the next section, a new typology to help understand the educational impact of the new accountability.

Issues of Bureaucratic and Professional Accountability: A New Typology

If one applies the three global foci of educational accountability (student accountability, fiscal, including anticorruption and access to education accountability, and teacher accountability) and cross-classified them with the two modalities of accountability (bureaucratic and professional), it would be possible to construct a typology into which future research might be classified. Table 1 presents the typology that we are using to categorize the chapters received from our contributors. We have two types of Accountability Modality, the Bureaucratic and the Professional, which is

		Accountability modality	
1.	Student accountability	Bureaucratic Focus on test scores and easy summary measures. Schools and teachers make retention-in- grade recommendations on the basis of single standardized test results	Professional Focus on learning and learning styles
2.	Anti-corruption	Reliance on the criminal law to redress graft, bribery, test cheating	Socialization and solidarity to self-police and ensure non-corrupt practices
3.	Educational access "Education for All"	Focus on enrollments, emphasis on enforcement of rigid admis- sion standards	Focus on quality of schooling and on facilitating access
4.	Teacher accountability	Sanctions for low test scores External monitoring Likely enhanced teacher Burnout and turnover, Teacher cynicism	Self-assessment, professional development, and mentoring activities intended to build capacity from within the teaching populations

 Table 1
 Application of bureaucratic and professional accountability to the global domains of educational accountability

informed by the words of Darling-Hammond (2000) and O' Day (2007). The first, the Bureaucratic, includes the emphases on objective indicators of outputs according to which improvement of student achievement can be measured. The second, the Professional, places emphasis on the process of learning, and takes into account factors related to the learning experience of students, and the factors related to teachers which facilitate the learning process.

Along the vertical axis are the targets of accountability, which include the students, teachers, and aspects of the policy itself, namely the elimination of corruption and "Education for All." These elements are informed by numerous reports of UNESCO's International Institute for Educational Planning (IIEP) and its 2007 Summer School program on "Transparency, accountability and anti-corruption measures in education" (IIEP, Paris, 6–15 June, 2007). This typology produces eight cells, each of which is described in terms of the criteria of accountability.

The utility of the typology becomes apparent if we examine in greater depth the various cells. We can do this by briefly considering each row. For example, if we focus on student accountability (Row 1), we find that from a bureaucratic perspective, the focus is on test scores, and other summary measures such as retention rates. On the other hand, from a professional perspective, the focus would be on the various learning styles to which the students would be subjected. The goal might be to match teaching and learning styles to maximize benefits to student knowledge while enhancing the effectiveness of teachers. The measures of accountability would include curricula and classroom practices.

If we go to the teacher category (Row 4), we find that from a bureaucratic perspective the focus would be on the various negative sanctions administered to unsuccessful teachers, as well as various measures of monitoring the practices of teachers. On the other hand, from a professional perspective the focus would be on the mechanisms whereby teachers' expertise and quality could be improved. In other words, instead of focusing on negative sanctions, the focus would be on teacher improvement.

Many of the standards-based accountability systems are premised, on the assumption that teachers and school personnel are indolent, and are likely to be dishonest if given the opportunity. This is especially the case in the United States. While Hopmann (2007) suggests that this may be more of an American malady, there have been elements of such thinking advanced in the accountability movements in other countries. In this respect, the cells in the typology which focus on the anticorruption dimensions of accountability (Row 2) are useful in obtaining research evidence about abuses in the educational system, or in the behavior of principals, teachers or students.

Finally, by focusing on the policy itself (Row 3), the dimensions of the structural aspects which affect the success of the policy are addressed. Thus from a bureaucratic perspective a research focus on enrollments and admission standards would provide important information on the policy's implementation. Conversely, examined from a professional perspective, the focus would be on the improvement of quality, and whether accountability policies actually helped to improve the quality of the educational system as a whole.

Looked at in this way, the typology is useful in conceptually clarifying the various types of accountability which we can currently find in the present educational climate. In addition, the typology also assists in identifying the manner in which, the nature of, and the impact of accountability, affects all educational personnel, including school principals, teachers, and students.

Conclusion

We think this typology helps point the way for future research on teachers and teaching in the present climate of accountability in many countries of the world. Indeed, in many ways, the chapters in this handbook might be classified in terms of one or more of the categories of this typology. By means of this exercise, one might begin to understand differently all aspects of teachers and their work; we may develop new research questions in the study of teachers and teaching; and indeed, we may develop a new paradigm or approach in theorizing about teachers and teaching. If these developments occur, there also may be implications for teacher education and teacher training programs.

In addition, apart from understanding how different forms of accountability operate, research designed from the typology could also direct attention more clearly to the impact of accountability policies on both students and teachers. We argue that in this way some of the disagreement about the consequences of accountability policies could be resolved. Furthermore, the more useful research evidence we have on the impact of accountability policies, the more we will be able to design policies which will have positive rather than negative effects on teachers, students, schools and societies.

Biographical Note

Lawrence J. Saha is a sociologist of education with 30 years experience in teaching and research. He is Professor in the School of Social Sciences at the Australian National University and a former Dean of the Faculty of Arts. His main areas of educational research are social psychology of education, dissemination of education research knowledge, education and development, and youth political socialization. Professor Saha has had extensive editorial experience. He was section editor (Sociology of Education) and contributor for the *International Encyclopedia of Education*, 2nd edition (Elsevier, 1994), and Editor of the *International Encyclopedia of the Sociology of Education* (Elsevier, 1997). His most recent works are *The Untested Accusation: Principals, Research Knowledge, and Policy Making in Schools* (Ablex Publishing Co., Westport Conn., 2002/2005 pbk, with Bruce J. Biddle) and *Youth and Political Participation* (co-editor, Sense Publishers, 2007). He currently is Editor-in Chief of *Social Psychology of Education: An International Journal* (Springer).

A. Gary Dworkin is Professor of Sociology and co-founder of the Sociology of Education Research Group (SERG) at the University of Houston in Texas, USA and a former chair of the Department of Sociology. Currently, he is Secretary of Research Committee 04 (Sociology of Education) of the International Sociological Association. He has served on the Council of the Sociology of Education section of the

American Sociological Association and as President of the Southwestern Sociological Association. His publications include ten books and numerous articles on teacher burnout and student dropout behavior, minority-majority relations and gender roles. and the assessment of school accountability systems. Recently, Dworkin published essays on accountability and high-stakes testing under The No Child Left Behind Act in the journal Sociology of Education (2005), in Sadovnik et al., No Child Left Behind and the Reduction of the Achievement Gap: Sociological Perspectives on Federal Education Policy (Routledge 2007) and on the unintended consequences of school accountability in the International Journal of Contemporary Sociology (2008). He also assessed the effects of retention-in-grade (with Jon Lorence, published by the Brookings Institution in Washington, D.C., 2002). Dworkin (with Rosalind J. Dworkin) wrote three editions of The Minority Report, a race, ethnic, and gender relations book (3rd edition published by Wadsworth 1999). Among some of his earlier books on teachers and teaching are Teacher Burnout in the Public Schools (SUNY Press, 1987), When Teachers Give Up (Hogg Foundation/Texas Press, 1985) and Giving Up on School (with Margaret D. LeCompte, Corwin/Sage Press, 1991).

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CONTRIBUTORS

Nordin Abd Razak School of Education, Universiti Sains Malaysia, Malaysia, norazak@usm.my

Helen Askell-Williams School of Education, Flinders University, Adelaide, Australia, helen.askell-williams@flinders.edu.au

Lawrence C. Awasom Department of Social Sciences – Anthropology, Houston Community College Northeast, The University of Houston, Pinemont, Houston, TX 77018, lawasomwalere@yahoo.com or Lawrence.awasom@hccs.edu

Elisha Babad School of Education, Hebrew University of Jerusalem, Mt. Scopus, Jerusalem 91905, Israel, Elisha@vms.huji.ac.il

Jeanne Ballantine Sociology and Anthropology College of Liberal Arts, Wright State University, Dayton, OH 45435, jeanne.ballantine@wright.edu

Barbara J. Bank University of Missouri, Columbia, MO 65211, bankb@missouri.edu

Nina Bascia Ontario Institute for Studies in Education of the University of Toronto, Toronto, ON, Canada M5S 1V6, nina.bascia@utoronto.ca

Jo Blase Department of Educational Leadership, College of Education, The University of Georgia, Athens, GA 30602, jblase@uga.edu

1188 Contributors

Joseph Blase College of Education, The University of Georgia, Athens, GA 30602, blase@uga.edu

Peter Blatchford Department of Psychology and Human Development, Institute of Education, University of London, London WC1H 0AA, UK, p.blatchford@ioe.ac.uk

Kathryn M. Borman Alliance for Applied Research in Education and Anthropology, Department of Anthropology, University of South Florida, Tampa, FL 33620, kborman@cas.usf.edu

Susan M. Brookhart Center for Advancing the Study of Teaching & Learning, School of Education, Duquesne University, Pittsburgh PA 15282, susanbrookhart@bresnan.net

Penelope Brown Department of Psychology and Human Development, Institute of Education, University of London, London WC1H 0AA, UK, p.brown@ioe.ac.uk

Robert V. Bullough, Jr. Center for the Improvement of Teacher Education and Schooling, Brigham Young University, Provo, UT 84602, Bob_Bullough@BYU.Edu

Emily Calhoun The Phoenix Alliance, St. Simons Island, GA 31522, EFCPhoenix@aol.com

Sophia Catsambis Queens College and Graduate Center, City University of New York, NY 10075, sophia@troll.soc.qc.edu

Andrea Christensen Department of Psychology, University of Notre Dame, Notre Dame, IN, Christensen.26@nd.edu

Anthony Clarke Faculty of Education, University of British Columbia, Vancouver, BC, Canada V6T1Z4, anthony.clarke@ubc.ca

Rodney A. Clifton Faculty of Education, St. John's College, University of Manitoba, Winnipeg, Manitoba, Canada R3T 2M5, Clifton@MS.UManitoba.ca

Michael L. Connell Department of Curriculum and Instruction, College of Education, University of Houston, Houston, TX 77204, MKahnl@aol.com Peter W. Cookson, Jr. Lewis & Clark College, Graduate School of Education & Counseling, Portland, OR 97219, cookson@lclark.edu

Bridget A. Cotner Alliance for Applied Research in Education and Anthropology, University of South Florida, Tampa, FL, bcotner@cas.usf.edu

Bronwen Cowie Centre for Science and Technology Education Research, University of Waikato, Hamilton, New Zealand, b.cowie@waikato.ac.nz

Cheryl Craig Department of Curriculum and Instruction, University of Houston, Houston, TX 77204, ccraig@uh.edu

I Gusti Ngurah Darmawan School of Education, The University of Adelaide, Adelaide, Australia, igusti.darmawan@adelaide.edu.au

A. Gary Dworkin Department of Sociology, University of Houston, Houston, TX, gdworkin@mail.uh.edu

Martina Endepohls-Ulpe Institut für Psychologie, Universität Koblenz-Landau, Campus Koblenz, Universitätsstraße 1, 56070 Koblenz, Germany, endepohl@uni-koblenz.de

Joshua M. Englehart Riverside High School, Painesville, OH 44077, pa_englehart@lgca.org

Yanping Fang Centre for Research in Pedagogies and Practices, National Institute of Education, Nanyang Technological University, Singapore 637616, yanping.fang@nie.edu.sg

Ida Rose Florez Educational Psychology, College of Education, Graduate College, University of Arizona, Tucson, AZ 85721, irflorez@email.arizona.edu

Barbara R. Foorman Florida Center for Reading Research, Florida State University, Tallahassee, FL 32301, bfoorman@fcrr.org

Phyllis Bach Frederick University of Cincinnati, Department of Education, Clermont College, University of Cincinnati, Batavia, OH, frederpb@adelphia.net Margaret Freund

Professional Community Identity and Social Justice, School of Education, University of South Australia, Mawson, Lakes Campus 5095, Australia, Margaret. Freund@unisa.edu.au

Rob Gilbert School of Education, The University of Queensland, St Lucia, Queensland 4072, Australia, Rob.Gilbert@uq.edu.au

Mark B. Ginsberg Academy for Educational Development, Washington, DC 20009, mginsburg49@yahoo.com

Thomas L. Good Educational Psychology, College of Education, University of Arizona, Tucson, AZ 85721, goodt@u.arizona.edu

S. Gopinathan Centre for Research in Pedagogies and Practices, National Institute of Education, Nanyang Technological University, Singapore 637616, Gopinathan.S@nie.edu.sg

Dana M. Grayson Department of Humanities and the Social Sciences, New York University, NY 10003, fmh1@nyu.edu

Hugh Guthrie National Centre for Vocational Education Research, Adelaide, SA 5000, Australia, hugh.guthrie@ncver.edu.au

Pamela R. Hallam Educational Leadership and Foundations 306 MCKB, Brigham Young University, Provo, UT 84602, pam_hallam@byu.edu

Floyd M. Hammack Department of Humanities and the Social Sciences, New York University, NY 10003, fmh1@nyu.edu

Melanie Hanes-Ramos University of South Carolina, Beaufort, SC, hanesml@gwm.sc.edu

Linda Hargreaves Faculty of Education, University of Cambridge, Cambridge, UK, lh258@cam.ac.uk

Elaine Harper Office of Doctoral Studies, Cleveland State University, Cleveland, OH 44115, e.harper@csuohio.edu Roger Harris Centre for Research in Education, Equity and Work, University of South Australia, Mawson Lakes, SA 5095, Australia, roger.harris@unisa.edu.au

Charles Hausman Educational Leadership Studies, University of Kentucky, Lexington, KY 40506, charles.hausman@uky.edu

Linda Hort CEDAM, The Australian National University, Canberra, ACT 0200, Australia, Linda.Hort@anu.edu.au

W. Robert Houston Department of Curriculum and Instruction, Institute for Urban Education at the University of Houston, Houston, TX, rhouston@uh.edu

David Imig Department of Curriculum and Instruction, College of Education, University of Maryland, College Park, MD 20742, dimig@umd.edu

Scott Imig Watson School of Education, University of North Carolina Wilmington, Wilmington, NC 28403, imigs@uncw.edu

Alister Jones School of Education, University of Waikato, Hamilton, New Zealand, a.jones@waikato.ac.nz

Bruce Joyce Booksend Laboratories, St. Simons Island, GA 31522, brjoyce@worldnet.att.net

Sangeeta G. Kamat Department of Educational Policy Research and Administration, University of Massachusetts-Amherst, South Amherst, MA 01003, skamat@educ.umass.edu

Stuart A. Karabenick Department of Psychology, University of Michigan, Ypsilanti, MI 48197, stuart.karabenick@emich.edu

Tom Karmel National Centre for Vocational Education Research, Station Arcade, Adelaide, SA 5000, Australia, tom.karmel@ncver.edu.au

John P. Keeves School of Education, The University of Adelaide, Adelaide, Australia, john.keeves@adelaide.edu.au

1192 Contributors

Sean Kelly Center for Research on Educational Opportunity, Notre Dame, IN 46556, Kelly.206@nd.edu

Bruce Allen Knight Research & Innovation, Faculty of Arts, Humanities & Education, Central Queensland University, Mackay, MC 4741, Australia, b.knight@cqu.edu.au

Stephen Koziol Department of Curriculum and Instruction (EDCI), College of Education, University of Maryland, College Park, MD 20742, skoziol@umd.edu

Revathy Kumar Judith Herb College of Education, The University of Toledo, Toledo, OH 43606, RKumar@UTNet.UToledo.Edu

Barbara Landau College of Education, University of Hawaii, Honolulu, HI 96822, blandau@hawaii.edu

Michael J. Lawson Centre for the Analysis of Educational Futures, School of Education, Flinders University, Adelaide, Australia, mike.lawson@flinders.edu.au

Margaret D. LeCompte School of Education, University of Colorado, Boulder, CO 80309, Margaret. Lecompte@colorado.edu

Ramon Lewis Faculty of Education, La Trobe University, Bundoora 3086, VIC, Australia, r.lewis@latrobe.edu.au

Jon Lorence Department of Sociology, The University of Houston, Houston, TX 77204, jlorence@mail.uh.edu

Wayne J. Martino Faculty of Education, The University of Western Ontario, London, ON, Canada N6G 1G7, wmartino@uwo.ca

David Mayrowetz Policy Studies, College of Education, University of Illinois at Chicago, Chicago, IL 60607 dmayro@uic.edu

Tricia McCann Faculty of Education, La Trobe University, Bundoora 3086, Australia, P.McCann@latrobe.edu.au Patrick J. W. McGinty Department of Sociology and Anthropology, Western Illinois University, Macomb, IL 61455, PJ-McGinty@wiu.edu

Nagwa M. Megahed Monitoring and Evaluation Division, Education Reform Program, Maadi, Cairo, Egypt, nmegahed@equipegypt.org

Debra K. Meyer Department of Education, Elmhurst College, Elmhurst, IN, debram@elmhurst.edu

Elaine Mueninghoff Department of Education, Clermont College, University of Cincinnati, Batavia, OH, muenine@uc.edu

Lynn M. Mulkey University of South Carolina, Beaufort, Bluffton, SC 29909, mulkey@sc.edu

Rosalind Murray-Harvey School of Education, Flinders University, Adelaide, Australia, roz.murray-harvey@flinders.edu.au

Gary Natriello Teachers College, Columbia University, NY 10027, gjn6@columbia.edu

Phoebe Palmieri Faculty of Education, Monash University, Clayton, VIC 3800, Australia, p.palmieri@optusnet.com.au

Elena Papamichael Institute of Education, University of London, London WC1N 2AB, UK, epapamichael@gmail.com

Virginia Pilato Division of Certification and Accreditation, Maryland State Department of Education, Baltimore, MD 21201, vpilato@msde.state.md.us

Murray Print Faculty of Education and Social Work, University of Sydney, Sydney, NSW 2006, Australia, m.print@edfac.usyd.edu.au

Alan J. Reiman Department of Curriculum and Instruction, College of Education, North Carolina State University, Raleigh, NC 27695, ajreiman@gwced.ncsu.edu

1194 Contributors

Nura Resh School of Education, Hebrew University of Jerusalem, Mount Scopus, Jerusalem 91905, Israel, msnura@mscc.huji.ac.il

Philip Riley Faculty of Education, Monash University, Melbourne, VIC, Australia, Philip.riley@education.monash.edu.au

Christine Rubie-Davies School of Teaching, Learning and Development, Faculty of Education, The University of Auckland, Auckland, New Zealand, c.rubie@auckland.ac.nz

Anthony Russell Department of Psychology and Human Development, Institute of Education, University of London, London WC1H 0AA, UK, a.russell@ioe.ac.uk

Clara Sabbagh Faculty of Education, University of Haifa, Mount Carmel, Haifa 31905, Israel, csabbagh@construct.haifa.ac.il

Lawrence J. Saha School of Social Sciences, Faculty of Arts, The Australian National University, Canberra, ACT 0200, Australia, Lawrence.Saha@anu.edu.au

Mavis G. Sanders Teacher Development and Leadership, Johns Hopkins University, Columbia, MD 21046, msanders@jhu.edu

Kristi L. Santi The Santi Group, Houston, TX 77225, kristi@thesantigroup.com

Terri Seddon Faculty of Education, Monash University, Clayton, VIC 3800, Australia, Terri.Seddon@Education.monash.edu.au

Michele Simons School of Education, University of South Australia, Mawson Lakes, SA 5095, Australia, michele.simons@unisa.edu.au

Mark A. Smylie College of Education, University of Illinois at Chicago, Chicago, IL 60607, smylie@uic.edu

Joan Z. Spade Department of Sociology, State University of New York, Brockport, NY 14420, jspade@brockport.edu Lala Carr Steelman Department of Sociology, University of South Carolina, Columbia, SC 29208, steelman@.sc.edu

Rosemary E. Sutton Cleveland State University, Department of Curriculum and Foundations, Cleveland, OH 44115, r.sutton@csuohio.edu

Clodie Tal Levinsky College of Teachers' Education, Tel Aviv 61490, Israel, clodietal@gmail.com

Pamela Tobe Sociology of Education Research Group, Department of Sociology, University of Houston, TX 77204, pftobe@comcast.net

John R. Todorovich Department of Health, Leisure, and Exercise Science, University of West Florida, Pensacola, FL, jtodorovich@uwf.edu

Thomas Kwan-Choi Tse Faculty of Education, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong, kctse@cuhk.edu.hk

Julianne C. Turner Department of Psychology, University of Notre Dame, Notre Dame, IN, jturner3@nd.edu

Jim Wolf The Phoenix Alliance, St. Simons Island, GA 31522

Sharon H. Ulanoff Charter College of Education, Curriculum and Instruction, California State University, Los Angeles, CA 90032, sulanof@exchange.calstatela.edu

Kerri Ullucci Dartmouth Education Department, University of Massachusetts, North Dartmouth, MA 02747, kullucci@umassd.edu

John A. Whitehouse Melbourne Graduate School of Education, The University of Melbourne, VIC 3010, Australia, j.whitehouse@unimelb.edu.au

Caroline R. H. Wiley Educational Psychology, College of Education, Graduate College, University of Arizona, Tucson, AZ 85721, crhummel@email.arizona.edu

1196 Contributors

Ping-Man Wong

Department of Educational Policy and Administration, Hong Kong Institute of Education, Tai Po, N.T., Hong Kong, pmwong@ied.edu.hk

Peter Wright School of Education, Murdoch University, Murdoch, Western Australia 6150, Australia, p.wright@murdoch.edu.au

Yoel Yinon Department of Psychology, Bar-Ilan University, Ramat Gan 52900, Israel, Yinony@mail.biu.ac.il

Joseph Zajda Trescowthick School of Education, Melbourne Campus, Australian Catholic University, Fitzroy, VIC 3065, Australia, j.zajda@patrick.acu.edu.au

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